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ABSTRACT

This document describes competencies needed by persons who complete the Los Angeles Schools' emergency medical aide competency-based program, which is designed to enhance their ability to obtain certification as an Emergency Medical Technician (EMT). The overall competency statement ("goal") of the program heads each page and is defined by one or more "indicator" statements. Indicator statements are performance objectives, which, upon attainment, will establish competency for the stated goal. Indicator statements are further qualified by a series of "benchmark" statements. A benchmark is an observable behavior. Benchmarks describe what trainees will do to prove that they are demonstrating achievement of the performance objective. There may be one or more benchmarks (behaviors) for each indicator statement (performance objective). Benchmark statements are followed by an "assessment" statement that describes how the observer determines that the benchmark is achieved. The program includes 10 mastery tests with answers, a survey of prior occupational knowledge, and a checklist for the instructor. Topics covered by the competencies include the emergency medical system; anatomy, signs, triage; cardiorespiratory system; musculoskeletal system; nervous system; gastrointestinal-genitourinary systems; common medical emergencies; childbirth and common pediatric emergencies; drug and alcohol abuse; and common environmental injuries. (KC)

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EMPLOYABILITY COMPETENCIES
FOR
ENTRY LEVEL
EMERGENCY MEDICAL AIDES

LOS ANGELES UNIFIED SCHOOL DISTRICT
Division of Adult and Occupational Education
Instructional Services Unit
Manpower Programs
January 29, 1986

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PREFACE

Purpose:

The Emergency Medical Aide competency-based program is designed to provide youth basic medical knowledge which will enhance their ability to obtain certification as an Emergency Medical Technician. (EMT)

Because many of the in-school youth attending Skills Centers are minors, this prohibits their participation in both the clincal and ambulance training modules associated with EMT training classes. Thus, the focus of this program is to train and certify youth in cardiopulmonary resuscitation (CPR), and advanced first aid skills. In addition, the program provides instruction in the fundamentals of the human anatomy, medical terminlogy, and treatment of common medical emergencies.

Students successfully completing the course, and who are eighteen years old, or are within six months of becoming eighteen, may qualify for entry into a short term program, (110 hours) which will qualify them for EMT certification. The short term class includes clinical experience, and extensive written and practical skills examinations.

Competency Statements:

The competency statement heading each page is the goal of the program. The competency statement is defined by one or more "indicator" statements. Indicator statements are performance objectives, which, upon attainment will establish competency for the stated goal.

Indicator statements are further qualified by a series of "benchmark" statements. A benchmark is an observable behavior. Benchmarks describe what the trainee will do to prove that he is demonstrating achievement of the performance objective. Benchmarks are an end result, they do not describe how the student learned the behavior, they only state what the behavior is. There may be one or more benchmarks (behaviors) for each indicator statement (performance objective).

Benchmark statements are followed by an "assessment" statement. The assessment statement describes how the observer determines that the benchmark is achieved. Assessment statements establish the criteria for performance.

Pre-Assessment:

A Survey of Prior Occupational Knowledge is included for use by the instructor to obtain from the student general information about the participants previous training, prior subject knowledge, and program expectations.

Documentation:

The program includes ten (10) mastery tests to document attainment of competency for each instructional unit. Some first aid skills are measured by practical exams. Answer keys are also included for instructor's use. A score of 65% or above is considered passing for all written exams. Students may be allowed to take open book tests if it is determined that students would benefit from this approach.

Certification of Competency Attainment:

Students who are able to obtain 80% or more of the competencies will be awarded a Certificate of Competency Attainment from the school. A competency attainment "check-off" sheet is included for the instructor's use. As trainees complete each mastery test, the instructor must indicate on the sheet the date of completion of each item. The "check-off" sheet is maintained in the participants file for future use and program monitoring. When the student is given his/her certification each unit of competency attainment must be listed on the certificate.

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APPENDIX

Survey of Prior Occupational Knowledge

Emergency Medical Aide Mastery Tests

Answer Guides for Each Test

Emergency Medical System

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates knowledge of an Emergency Medical System and the legal responsibilities of an EMT.

Benchmark:

The trainee names the essential elements of an Emergency Medical System.

Assessment:

The trainee names no less than three (3) of the following elements on a written test:

1. Advisory council on emergency medical service.
2. Public information and education programs.
3. Dispatch centers.
4. Ambulance services.
5. EMT training programs.
6. Instructor training programs.
7. Categorized hospital emergency capabilities.
8. Communications.
9. EMT and Emergency Department personnel rapport.
10. Reports and records.
11. Disaster plans.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

- The trainee demonstrates knowledge of an Emergency Medical System and the legal responsibilities of an EMT.

Benchmark:

The trainee names the attributes of a "good" EMT.

Assessment:

The trainee names no less than three (3) of the following attributes on a written test:

1. Good personal appearance.

2. Technical knowledge.

3. Ability to render care.

4. Ability to perform under pressure with composure and self confidence.

5. Must control personal emotions.

6. Must be sympathetic to the abnormal or exaggerated actions of those under stress.

7. Exert reasonable and firm leadership in carrying out measures that ensure the survival, safety, and comfort of the patient from the time of arrival at the scene to the hospital.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates knowledge of an Emergency Medical System and the legal responsibilities of an EMT.

Benchmark:

The trainee identifies the responsibilities and capabilities of an EMT.

Assessment:

The trainee identifies no less than 70% of the following items on a written test:

RESPONSIBILITIES

1. Careful evaluation of all signs and symptoms.

2. Prompt and efficient medical care of the patient before transportation.

3. Control at the scene.

4. Extrication of the patient and preparation for transport.

5. Sane and supervised transport.

6. Orderly transfer of the patient at a medical facility.

7. Communication with all persons involved.

8. Proper reporting and record keeping.

9. Vehicle and equipment care.

(Continues next page)

CAPABILITIES

1. Establish and maintain a patent airway.

2. Administer intermittent positive-pressure ventilation.

3. Perform CPR.

4. Control accessible bleeding.

5. Treat shock.

6. Care for cases of poisoning.

7. Dress and bandage wounds.

8. Splint fractures.

9. Provide obstetrical assistance.

10. Care for new born infants, including premature.

11. Be competent in emergency and defensive driving.

12. Maintain and properly use supplies.

13. Be able to communicate both verbally and in writing.

14. Control the scene of illness or injury.

15. Be competent in proper extrication.

16. Be able to cope with medicolegal problems.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates knowledge of an Emergency Medical System and the legal responsibilities of an EMT.

Benchmark:

The trainee identifies legal situations in which the EMT may become involved.

Assessment:

The trainee identifies no less than three (3) of the following "consents" on a written test:

1. Oral or written consent.
2. Implied consent.
3. Minor's consent.
4. Consent of the mentally ill.
5. Right to refuse treatment.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates knowledge of an Emergency Medical System and the legal responsibilities of an EMT.

Benchmark:

The trainee explains the "Good Samaritan Law" as it applies to the EMT.

Assessment:

The trainee explains the "Good Samaritan Law" on a written test. His/her responses indicates that he/she is aware these laws assure that someone who voluntarily undertakes to help an injured or suddenly ill person at the scene is not chargeable with any fault or responsibility at law for errors or omissions in the rendered care, provided he/she works within his level of expertise. However, the provisions of these laws are not absolute, and do in fact vary from state to state.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates knowledge of an Emergency Medical System and the legal responsibilities of an EMT.

Benchmark:

The trainee names situations where he/she is required by law to report the incident to proper legal authorities.

Assessment:

The trainee identifies no less than five (5) of the following situations on a written test:

1. Child abuse.
2. Injury during the commission of a felony.
3. Drug-related injuries.
4. Attempted suicides.
5. Dog bites.
6. Communicable diseases.
7. Assaults.
8. Rapes.
9. Births.
10. Scene of a crime.

Anatomy - Signs - Triage

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a fundamental understanding of the human anatomy, diagnostic signs and the principles of triage.

Benchmark:

The trainee identifies and names in topographic terms, the major parts of the body including regions of the head, neck, thorax, abdomen, pelvis and lower extremity.

Assessment:

Given pictures of the body and specific body regions, the trainee correctly identifies the major body parts.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a fundamental understanding of the human anatomy, diagnostic signs and the principles of triage.

Benchmark:

The trainee identifies arterial pressure points on the human body and describes the clinical use of arterial pressure points.

Assessment:

Given a picture of a human body, the trainee identifies five (5) out of nine (9) arterial pressure points:

1. External maxillary.
2. Temporal.
3. Carotid.
4. Radial.
5. Ulnar.
6. Femoral.
7. Dorsalis pedis.
8. Posterior tibialis.
9. Brachial.

The trainee states that pressure points are used to ascertain correctly the presence of cardiac activity or the absence of a proximal arterial injury, and to control bleeding.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a fundamental understanding of the human anatomy, diagnostic signs and the principles of triage.

Benchmark:

The trainee distinguishes between "signs" and "symptoms". He/she names the nine (9) diagnostic signs and demonstrates the ability to correctly measure each of the nine signs.

Assessment:

The trainee defines the terms "signs" and "symptoms" as:

Signs - manifestated changes in the body that can be observed.

Symptoms - are evidence of changes in the body functions apparent to the patient and expressed to the EMT as a result of questioning.

The trainee successfully completes a practical examination which demonstrates his/her ability to name no less than five (5) diagnostic signs and correctly implement method to measure each sign:

Pulse
Respiration
Blood pressure
Temperature
Skin color

Pupils
State of consciousness
Ability to move
Reaction to pain

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a fundamental understanding of the human anatomy, diagnostic signs and the principles of triage.

Benchmark:

The trainee distinguishes between primary and secondary patient assessment by completing a written examination which identifies the elements of primary and secondary patient assessments and other information pertinent to patient assessment.

Assessment:

Trainee responses on the unit exam include assessment information, under what circumstances assessment should be interrupted to deliver emergency care, and identification of Emergency Medical Identification symbols.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a fundamental understanding of the human anatomy, diagnostic signs and the principles of triage.

Benchmark:

The trainee demonstrates an understanding of triage.

Assessment:

The trainee provides the following information on a written test:

1. The definition of triage.

2. Identification of the three categories of triage and the types of injuries or disease in each category.

Cardiorespiratory System

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates knowledge of the respiratory system by completing a written exam.

Assessment:

The trainee provides the following information on a human diagram:

1. Identifies the boundaries of the thoracic cavity.

2. Identifies the contents of the thoracic cavity.

3. Identifies the organs of the body that are involved in normal respiration.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

By completing a written exam, the trainee demonstrates a basic understanding of the function of the respiratory system in normal metabolism.

Assessment:

The trainee provides the following information:

1. Describes the function of the respiratory system in gas exchange.

2. Identifies the pulmonary and systemic capillary circulation and how it functions in metabolism.

3. Defines the term metabolism.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates a basic understanding of the mechanics of respiration.

Assessment:

The trainee provides the following information on a written exam.

1. Identifies the pleura space.

2. Describes how breathing is controlled by the brain.

3. Identifies the larynx and epiglottis on a picture and describes their functions.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates basic knowledge of the types of chest injuries and how to recognize them.

Assessment:

The trainee provides the following information on a written test:

1. Identifies the two major classes of chest injuries.

2. States at least three (3) signs of serious chest injury.

3. Matches the following terms with the correct definition:

pneumothorax
hemothorax
pulmonary contusion
myocardial contusion
flail chest

4. Provides two (2) physiological reasons why chest injuries are serious.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates knowledge of the emergency medical care of patients with chest injuries.

Assessment:

On a written test, the trainee provides the following information:

1. Lists four general steps to follow in the care of any patient with a chest injury.

2. Identifies the special steps to take for patients with:

    rib fractures
    flail chest
    sucking chest wounds
    impaled foreign bodies

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates basic knowledge of the causes of dyspnea and identifies the signs to recognize it.

Assessment:

The trainee provides the following information on a written test:

1. Defines the term dyspnea.

2. Lists three causes of traumatic dyspnea, and three causes of nontraumatic dyspnea.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates fundamental knowledge of the circulatory, or cardiovascular system.

Assessment:

The trainee provides the following information on a written test:

1. Describes the functions of the parts of the cardiovascular system.

2. Defines the term perfusion.

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates basic knowledge of the component parts of the blood and their functions.

Assessment:

The trainee provides the following information on a written test:

1. Identifies the cellular components of normal blood.

2. Describes the functions of each of the types of cells in blood, RBC, WBC, and platelets.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates basic knowledge of the means by which oxygen reaches the cells of the body.

Assessment:

The trainee provides the following minimum information on a written test:

1. Describes the exchange of oxygen in the tissues.

2. Describes the exchange of oxygen and carbon dioxide in the lungs.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates an understanding of normal blood volumes and understands how the body adjusts to changes in these volumes or in the circulatory system to maintain its function.

Assessment:

The trainee provides the following information on a written test:

1. Defines the terms pulse, blood pressure, and identifies the normal reading for each.

2. States the approximate volume of blood for infants, children, and adults.

3. Describes how the circulatory system adjusts to changes imposed on it.

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates the ability to recognize the existence of internal and external bleeding.

Assessment:

The trainee provides the following information on a written test:

1. Identifies the characteristics of bleeding from arteries, veins, and capillaries.

2. Describes the signs by which internal and external hemorrhage may be recognized.

3. Describes epistaxis.

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates knowledge of the physiologic effects of severe bleeding.

Assessment:

The trainee provides the following information on a written test:

States the amount of blood loss that can be sustained by infants, children, or adults without shock developing.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee understands the problems of controlling hemorrhage and knows the means by which it may be achieved.

Assessment:

The trainee provides the following information on a written test:

1. Lists and describes three basic methods by which the EMT may control external bleeding.

2. States the dangers arising from improperly used tourniquets.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates a fundamental understanding of the physiology of shock.

Assessment:

The trainee provides the following information on a written test:

1. Defines perfusion.

2. States the three major causes of shock.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates knowledge of the clinical situations that can cause shock.

Assessment:

The trainee provides the following information on a written test.

1. States five of the eight types of shock.

2. For each of the situations noted in #1, states the physiological process responsible for the development of shock.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee understands the diagnosis of shock.

Assessment:

The trainee provides the following information on a written exam.

1. Describes six general signs and symptoms that indicate the development of shock.

2. Describes the three specific signs and symptoms associated with the development of anaphylactic shock.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates an understanding of the treatment of patients in shock.

Assessment:

The trainee provides the following information on a written exam:

1. Lists and describes six general steps applicable to the treatment of all patients in shock.

2. States the theory behind the use of a pneumatic counter-pressure device.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

The trainee demonstrates knowledge of basic life support and the steps for airway, breathing, and cardiac arrest.

Assessment:

The trainee provides the following information on a written test:

1. Defines the term "basic life support" including the steps for:

    A - Airway
    B - Breathing
    C - Circulatory or cardiac arrest.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

By completing a practical exam, the trainee demonstrates knowledge of the procedures used in external chest compression (artificial circulation).

Assessment:

The trainee demonstrates the following:

1. The technique for identifying pulselessness.

2. The technique of closed-chest compression.

3. Resuscitation techniques used by two persons and by one person.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

By completing a practical exam, the trainee demonstrates knowledge of the procedures for basic life support in infants and children.

Assessment:

The trainee demonstrates the following:

1. The techniques used to manage airway obstruction.

2. Artificial ventilation procedures.

3. The techniques for identifying pulselessness in infants.

4. The methods of external chest compression in infants.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

By completing a practical exam, the trainee demonstrates an understanding of the proper use of artificial ventilation devices.

Assessment:

The trainee demonstrates the following:

1. Proper techniques for insertion of oropharyngeal and nasopharyngeal airways.

2. The procedures for proper suctioning.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the cardiorespiratory system, and further demonstrates the ability to provide emergency care for typical cardiorespiratory related medical emergencies.

Benchmark:

By completing a written exam, the trainee demonstrates a basic understanding of the role of supplemental oxygen.

Assessment:

The trainee provides the following information:

1. Identifies the indications for the use of supplemental oxygen.

2. Lists three hazards of oxygen administration.

3. Explains the importance of humidification in supplemental oxygen administration.

Musculoskeletal System

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

By completing a written exam, the trainee demonstrates knowledge of the structure and function of the skin.

Assessment:

The trainee provides the following information:

1. Identifies the layers of the skin.
2. Defines the two major functions of the skin.

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee demonstrates a basic understanding of the skeletal muscular function and recognizes and understands the terms voluntary muscle.

Assessment:

The trainee provides the following information on a written test:

1. Identifies and describes the functions of the voluntary muscles.

2. Describes the terms origin and insertion.

3. Defines the terms, "ligament" and "tendon".

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee identifies and knows the functions of the three types of muscles.

Assessment:

Given a picture of the human musculoskeletal system, the trainee identifies the three types of nonvoluntary muscles.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee demonstrates knowledge of the signs of open and closed soft tissue injuries and their treatment.

Assessment:

The trainee provides the following information on a written test:

1. Describes the lesions seen with closed soft tissue injuries.

2. Defines the difference between ecchymosis and hematoma.

3. Describes four open soft tissue injuries.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee demonstrates knowledge of the treatment of open soft tissue wounds.

Assessment:

On a written test, the trainee describes the treatment for open soft tissue wounds.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee demonstrates knowledge of the special treatment for impaled foreign objects.

Assessment:

On a written test, the trainee identifies two (2) treatments for impaled foreign objects.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee demonstrates an understanding of the three principle functions for dressings and bandages.

Assessment:

The trainee provides the following information on a written test:

1. Names the three general principles for dressing and bandaging a wound.

2. Identifies the appropriate use of occlusive dressings.

3. Identifies the appropriate use of pressure dressings.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee demonstrates a fundamental understanding of the structure and unction of the skeletal system.

Assessment:

The trainee provides the following information on a written test:

1. Identifies on a picture the various parts of bone.

2. Defines the term "joint".

3. Describes how muscles produce joint motion.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee demonstrates knowledge of the common injuries to the musculoskeletal system.

Assessment:

On a written test, the trainee provides the following information:

1. Defines "fracture", "dislocation", "sprain", and "strain".

2. Distinguishes between an open and closed fracture.

3. Explains the difference between displaced and non-displaced fractures.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee demonstrates knowledge of the signs and symptoms of fractures.

Assessment:

The trainee provides the following information on a written test:

1. Names the four signs of a fracture.

2. Names the two signs of a dislocation.

3. Names the three signs of a sprain.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee demonstrates an understanding of the principles of examination of the extremities and spine.

Assessment:

On a written test, the trainee provides the following information:

1. Names the three steps used in the evaluation of an injured limb.

2. Names the four neurovascular parameters that should be evaluated in each injured limb and the significance of their evaluation.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee demonstrates an understanding of the general principles of treating injured limbs.

Assessment:

The trainee demonstrates the correct application of traction splints, rigid board splints, and soft splints.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee demonstrates basic knowledge of the treatment of upper-extremity injuries.

Assessment:

During a practical test, the trainee demonstrates the proper application of sling and swathe splints, padded board splints, and air splints.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee demonstrates a basic understanding of the emergency evaluation and treatment of pelvic and lower extremity injuries.

Assessment:

The trainee demonstrates the proper application of long spine board splints, and traction splints for the lower extremities.

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee demonstrates basic knowledge of the structure and function of the spine and spinal cord.

Assessment:

On a written test, the trainee provides the following information:

1. Defines the term "spinal cord".

2. Identifies the mechanism of injury of the spinal cord.

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

The trainee demonstrates an understanding of the emergency management of all spinal injuries and how to diagnose a spinal injury.

Assessment:

During practical testing, the trainee identifies three signs of a spinal injury, and demonstrates the proper techniques of splinting spinal injuries using a long spine board.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the musculoskeletal system, and further demonstrates the ability to provide emergency care for common fractures, dislocations, and sprains.

Benchmark:

Assessment:

Nervous System

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the nervous system, and also demonstrates the ability to provide emergency care for common injuries of the skull, eye, face, and throat.

Benchmark:

The trainee demonstrates knowledge of the structures and functions of the nervous system.

Assessment:

The trainee provides the following information on a written test:

1. Names and identifies the major structures of the central nervous system.

2. Identifies and names the structures of the peripheral nervous system.

3. Identifies and names the components of the autonomic nervous system.

4. Identifies the function of the central nervous system and its components: cerebrum, cerbellum, brain stem, and spinal cord.

5. States the functions of the peripheral nervous system.

6. States the functions of the autonomic nervous system.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the nervous system, and also demonstrates the ability to provide emergency care for common injuries of the skull, eye, face, and throat.

Benchmark:

The trainee demonstrates knowledge of the various structures of the eye and has a basic understanding of their functions.

Assessment:

The trainee provides the following information on a written test:

1. Labels on a diagram five specific anatomical structures of the eye.

2. Describes the specific functions of each of the eye structures named in item #1.

3. Describes the pupillary reaction to light and distance.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the nervous system, and also demonstrates the ability to provide emergency care for common injuries of the skull, eye, face, and throat.

Benchmark:

The trainee demonstrates knowledge of the procedures for evaluating and treating injuries of the eye.

Assessment:

The trainee provides the following information on a written test:

1. Describes the diagnosis and treatment of the types of burns that can affect the eyes.

2. Describes the treatment of lacerations and contusions of the eye.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the nervous system, and also demonstrates the ability to provide emergency care for common injuries of the skull, eye, face, and throat.

Benchmark:

The trainee demonstrates awareness of the procedures for evaluating and treating injuries of the face and throat.

Assessment:

The trainee provides the following information on a written test:

1. List the possible causes of breathing problems in relation to face and head injuries.

2. Describes the emergency care of soft tissue injuries of the scalp, face, and throat.

3. Explains the results of various injuries of the throat (blunt and penetrating) and the emergency treatment for them.

4. Describes the emergency treatment of injuries of the nose.

5. Describes the results of fractures of the facial bones and the emergency treatment for these injuries.

Gastrointestinal - Genirourinary Systems

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the gastrointestinal and genitourinary systems, and has knowledge of typical gastrointestinal and genitourinary emergency complaints.

Benchmark:

The trainee demonstrates knowledge of the abdominal and pelvic cavities and the organ contained within and around them.

Assessment:

The trainee provides the following information on a written test:

1. Given a picture of the abdomen the trainee identifies the following:
    a. Boundaries of the abdominal cavity.
    b. Boundaries of the pelvic cavity.
    c. The retroperitoneal space.

2. Lists the contents of the abdominal and pelvic cavities.

3. Lists the components of the gastrointestinal tract and the digestive system.

4. Lists the hollow organs of the abdomen, pelvis, and retroperitoneal space.

5. Lists the solid organs of the abdomen and retroperitoneal space.

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the gastrointestinal and genitourinary systems, and has knowledge of typical gastrointestinal and genitourinary emergency complaints.

Benchmark:

The trainee demonstrates knowledge of the anatomy of the intra-abdominal and retroperitoneal organs.

Assessment:

The trainee provides the following information on a written test:

1. Defines the terms "peritoneum", "mesentery", and "serosa".

2. Identifies the topographical anatomy of the abdomen.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the gastrointestinal and genitourinary systems, and has knowledge of typical gastrointestinal and genitourinary emergency complaints.

Benchmark:

The trainee demonstrates knowledge of the component organs of the digestive system.

Assessment:

The trainee provides the following information on a written test:

1. Defines "digestion".

2. States the functions of each part of the digestive system in the process of digestion.

3. Defines "peristalsis".

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the gastrointestinal and genitourinary systems, and has knowledge of typical gastrointestinal and genitourinary emergency complaints.

Benchmark:

The trainee demonstrates knowledge of the types and characteristics of severe abdominal injuries and the procedures for treating abdominal injuries.

Assessment:

The trainee provides the following information on a written test:

1. Differentiates between open and closed injuries.

2. Defines "evisceration".

3. Lists the general signs of abdominal injuries.

4. Lists the general symptoms of abdominal injuries.

5. Describes the characteristics and results of hollow-organ injuries.

6. Describes the characteristics and results of solid-organ injuries.

7. Describes the methods and procedures used for evaluating a patient with an abdominal injury.

8. Describes the emergency medical treatment of a patient with a severe penetrating abdominal injury.

9. Lists the steps in the treatment of a patient with an abdominal evisceration.

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the gastrointestinal and genitourinary systems, and has knowledge of typical gastrointestinal and genitourinary emergency complaints.

Benchmark:

The trainee demonstrates knowledge of the structures and functions of the genitourinary systems in the male and female.

Assessment:

The trainee provides the following information on a written test:

1. Describes the structures and functions of the urinary system.

2. Describes the structures and functions of the genital system in the male and female.

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of the gastrointestinal and genitourinary systems, and has knowledge of typical gastrointestinal and genitourinary emergency complaints.

Benchmark:

The trainee demonstrates knowledge of the characteristics of injuries of the genitourinary system and the procedures for treating injuries of the genitourinary tract.

Assessment:

The trainee provides the following information on a written test:

1. Identifies the characteristics of the various injuries of the components of the urinary system.

2. Identifies the characteristics of the various injuries of the parts of the genital system in the male and female.

3. Describes the procedures used by the EMT for treating injuries of the urinary tract.

4. Describes the procedures used by the EMT for treating the injuries of the male and female genitalia.

5. Identifies the procedures in treating and dealing with the victim of sexual assault.

Common Medical Emergencies

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates the ability to provide emergency care for common medical emergencies.

Benchmark:

The trainee demonstrates a basic understanding of the physiology of the heart and how it meets increased demands for output of blood and the importance of coronary arteriosclerosis as a clinical problem.

Assessment:

The trainee provides the following information on a written test:

1. Identifies the coronary arteries.
2. Describes the process of atherosclerosis.
3. Identifies three risk factors associated with heart disease.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates the ability to provide emergency care for common medical emergencies.

Benchmark:

The trainee demonstrates a basic understanding of the following elements:

1. Differences between angina pectoris and acute myocardial infarction (AMI) (heart attack).

2. The mechanisms of congestive heart failure.

Assessment:

The trainee provides the following information on a written test:

1. Describes the usual presentation of angina.
2. Describes the differences between angina and AMI.
3. Describes the treatment of angina pectoris.
4. Describes the presentations of AMI.

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates the ability to provide emergency care for common medical emergencies.

Benchmark:

The trainee demonstrates an understanding of stroke, its effects on the person, and the procedures for the immediate care of the stroke patient.

Assessment:

The trainee provides the following information on a written test:

1. Defines stroke or "cerebrovascular accident" (CVA).

2. Describes the various presenting symptoms of strokes from each of the three different causes.

3. Describes the immediate care of the patient with stroke.

4. Lists precautions to be taken that are unique to the stroke patient.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates the ability to provide emergency care for common medical emergencies.

Benchmark:

The trainee demonstrates a basic understanding of the causes and results of diabetes melitus.

Assessment:

The trainee provides the following information on a written test:

1. Identifies the differences between diabetic coma and insulin shock.

2. Lists the symptoms of diabetic coma.

3. Lists the symptoms of insulin shock.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates the ability to provide emergency care for common medical emergencies.

Benchmark:

The trainee demonstrates knowledge of situations that can cause loss of consciousness and identifies the appropriate emergency therapy for an unconscious person.

Assessment:

The trainee provides the following information on a written test:

1. Lists the specific causes of unconsciousness.

2. Defines the term "convulsion".

3. Describes the general care of an unconscious patient.

4. Describes the treatment of and special considerations for the person who has a convulsion.

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates the ability to provide emergency care for common medical emergencies.

Benchmark:

The trainee demonstrates an understanding of what constitutes a communicable disease, and the role of the EMT in dealing with a communicable disease.

Assessment:

The trainee provides the following information on a written test:

1. Defines the terms used when referring to a communicable disease.

2. Lists three modes of transmission of a communicable disease.

3. Lists measures to be taken by the EMT to lessen personal exposure to a communicable disease.

4. Lists measures the EMT must take in the maintenance of the emergency vehicle when it is exposed to a communicable disease.

5. Lists measures the EMT must take in handling a patient with a known communicable disease.

Childbirth - Common Pediatric Emergencies

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of childbirth procedures and common pediatric emergencies.

Benchmark:

The trainee demonstrates knowledge of basic principles of labor and childbirth, identification and treatment of emergency problems in a pregnant woman, and the procedures for the emergency delivery of a baby.

Assessment:

The trainee provides the following information on a written test:

1. Lists three occurrences that indicate the beginning of labor.

2. Defines the three stages of labor.

3. Identifies four things to do for a pregnant woman with convulsions.

4. Identifies three conditions that indicate that the birth of the baby is imminent.

5. Identifies three conditions that indicate that the birth of the baby is imminent.

6. Identifies the complications of delivery and their management.

7. Lists three things to do for the baby after delivery.

8. Lists the steps in cutting the cord.

9. Lists the steps in delivering the placenta.

(Continues next page)

10. Lists the steps in resuscitation of a newborn.

11. Identifies the premature baby.

12. Lists the steps to be taken for the care of the mother after a normal delivery.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates a basic understanding of childbirth procedures and common pediatric emergencies.

Benchmark:

The trainee demonstrates knowledge of the diagnosis and
management of common pediatric emergencies.

Assessment:

The trainee provides the following information on a written test:

1. Defines the terms "infant" and "child".

2. Defines "croup" and "epiglottis" and lists the emergency steps to take.

3. Lists three causes of shock in children.

4. Describes the emergency management of fever in children.

5. Names two causes of abdominal pain in children.

6. Names one instance when a child who has swallowed poison should not be induced to vomit.

Drug and Alcohol Abuse

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates knowledge of mental health problems related to alcohol and drug abuse.

Benchmark:

The trainee demonstrates knowledge of the principles of drug and alcohol abuse and the emergency care of a patient who has abused alcohol or drugs.

Assessment:

The trainee provides the following information on a written test:

1. Identifies three commonly used depressants and describes their effects on the body.

2. Identifies two commonly used stimulants and describes their effects on the body.

3. Identifies two hallucinogens and describes their effects on the body.

4. Identifies two effects of drug withdrawal.

5. Identifies two effects of alcohol withdrawal.

6. States the immediate care of a patient suspected of a drug overdose.

Common Environmental Injuries

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates the ability to provide emergency care for common environmental injuries.

Benchmark:

The trainee demonstrates knowledge of the types of heat exposure, effects upon the body, the treatment of thermal burns, chemical burns, electrical burns, and radiation burns.

Assessment:

The trainee provides the following information on a written test:

1. Names two environmental sources of heat exposure.

2. Distinguishes between first, second, and third degree burns.

3. States the rule of nines as applied to burn treatment.

4. States the steps for treatment of thermal burns.

5. Lists three steps in the management of alkali and acid burns.

6. States the precautions to take at the scene of an electrical accident.

7. Describes the effect of nuclear and solar radiation upon the body.

8. Describes the general management of nuclear and solar burns.

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates the ability to provide emergency care for common.

Benchmark:

The trainee demonstrates knowledge of the basic principles of an electric circuit, its effect on the body, and how to treat a person who has sustained an electrical injury.

Assessment:

The trainee provides the following information on a written test:

1. Names three common conductors of electricity.

2. States how a person can complete an electric circuit.

3. States the emergency treatment for a person who has come in contact with a live high-voltage power line.

4. States the emergency treatment of a person who has developed cardiac standstill from an electric shock.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates the ability to provide emergency care for common environmental injuries.

Benchmark:

The trainee demonstrates knowledge of common water hazards and the emergency treatment of injuries resulting from water accidents.

Assessment:

The trainee provides the following information on a written test:

1. Defines "drowning".

2. Describes the "breath-holding blackout".

3. Lists three different kinds of accidents that occur in the water.

4. Lists considerations in determining the recovery of a patient from a water accident.

5. Describes the management of a drowning victim with a suspected neck injury.

6. Describes the emergency management of a patient with decompression sickness.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates the ability to provide emergency care for common environmental injuries.

Benchmark:

The trainee demonstrates knowledge of the general scope of the common forms and problems of poisoning.

Assessment:

The trainee provides the following information on a written test:

1. Defines the term "poison".

2. Lists the common categories of poisons in the household.

3. Lists the system of the body that may be affected by poisons.

4. Lists the steps that should be taken in attending a patient who has ingested a poison.

5. Lists circumstances under which vomiting should not be induced for an ingested poison.

6. Describes the emergency treatment of a patient who has had contact with a surface poison.

Competency Area: EMERGENCY MEDICAL AIDE

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates the ability to provide emergency care for common environmental injuries.

Benchmark:

The trainee demonstrates knowledge of the problems associated with insect bites and stings.

Assessment:

The trainee provides the following information on a written test:

1. Lists the common classes of insects that can cause painful or harmful bites.

2. Describes the two types of responses the body makes in reaction to an insect bite or sting.

3. Describes the emergency treatment of a patient who has an allergic reaction to an insect sting.

4. Describes the signs, symptoms, and emergency treatment of a patient who has been bitten by a black widow spider.

5. Describes the signs, symptoms, and emergency treatment of a patient who has been bitten by a brown recluse spider.

Competency Area: **EMERGENCY MEDICAL AIDE**

Competency Statement:

The trainee has the fundamental knowledge and skills required to effectively perform the duties of an Emergency Medical Aide (EMT-A), including patient assessment, pre-hospital care, and correct handling of medical emergencies.

Indicator:

The trainee demonstrates the ability to provide emergency care for common environmental injuries.

Benchmark:

The trainee demonstrates knowledge of the problems related to dog bites.

Assessment:

The trainee provides the following information on a written test:

1. Lists three carriers of rabies.

2. Identifies the steps in the management of a patient bitten by a possible rabid dog.

APPENDIX

Survey of Prior Occupational Knowledge

Emergency Medical Aide Mastery Tests

Answer Guides for Each Test

EMERGENCY MEDICAL AIDE

Survey of Prior Occupational Knowledge

Student Name: ______________________________ Date: __________

Class Location: ____

Instructor: ____

Because you are a new student in the Emergency Medical Aide program, your teacher wants to know more about you. Answering the following questions will help your teacher address your instructional needs. If you do not know how to answer a question, just write "I don't know".

1. How did you learn about the Skills Center's vocational training programs?

   ____

2. Why do you want to attend the Skills Center training program?

   ____

   ____

3. Why do you want to enroll in the Emergency Medical Aide class?

   ____

   ____

4. What do you expect to know when you finish this course?

   ____

   ____

5. Have you ever had any other classes in first aid, CPR, etc? If so, where and when were the classes held? What grades did you receive?

   ____

   ____

6. Do you have any friends or relatives working in a Medical occupation? If so, who? What have they told you about working in this field?

   ____

   ____

   ____

Page 2 (EMT-Survey of Prior Occupational Knowledge)

7. Have you ever had a job?

8. If you have worked, where was it, and what did you do? How long did you work?

9. Have you ever worked in the Medical field? If so, where and what did you do?

10. What skills should a "good" Emergency Medical Aide have?

11. How much money would you expect to earn if you are employed as an Emergency Medical Technician?

12. What does it mean "entry level position"?

13. What clothes should you wear as an Emergency Medical Aide?

14. What equipment would you expect to use on the job?

15. What types of duties is a Emergency Medical Aide likely to perform?

16. Working in emergency medical situtations involves dealing with human suffering and tragedy, sometimes death. What type of personality would be most suitable for this work?

17. Do you work well under pressure?________________________

18. Do you like working with people?_______________________

19. How do you feel about taking instructions from a supervisor or someone of higher authority than yourself?

20. What is the best thing about working in the emergency medical field?

21. What do you think would be the most difficult thing about working in the emergency medical field?

22. Have you ever taken a class in anatomy?_________________

EMERGENCY MEDICAL AIDE

Student Name:______________________________ Date:____________

Class Location:____________________________

Instructor:________________________________

Mastery Test #1

The Emergency Medical System

True (T) or false (F):

1.____ EMT training programs, dispatch centers, and disaster plans are essential elements of the Emergency Medical System.

2.____ Good personal appearance, poor character, and ability to render care are attributes of a good EMT.

RESPONSIBILITY means overall general duty.

CAPABILITY means a skill to carry out responsibilities.

Write "R" for responsibility, or "C" for capability next to the sentence below that reflects the correct definition.

3.____ Perform CPR.

4.____ Sane and supervised transport.

5.____ Treat shock.

6.____ Dress and bandage wounds.

7.____ Reporting and record keeping.

8.____ Splint fractures.

9.____ Communication with all persons involved.

10.____ Establish open airway.

11.____ Care for newborn.

12.____ Be able to cope with medicolegal problems.

13.____ General control at the scene.

14.____ General vehicle and equipment care.

15.____ Administer intermittent positive pressure breathing.

16. Define the term "consent".

17. Define the term "implied consent".

18. Explain "right to refuse treatment".

19. Explain what is meant by the "Good Samaritan Law".

20. Who provides consent for a minor?________________

21. List five (5) situations that an EMT is required to report the incident to the proper legal authorities.

____

____

____

____

____

EMERGENCY MEDICAL AIDE

Student Name:______________________________ Date:__________

Class Location:____________________________

Instructor:________________________________

Mastery Test #2

Anatomy and Triage

DIRECTIONS: Write each term next to the correct definition.

sign
pupil reaction
temperature
primary survey
secondary survey
category 3-green
skin color
pulse
ability to move
reaction to pain
category 2-yellow
state of consciousness
symptom
blood pressure
triage
category 1-red

________________ What a patient feels.

________________ What can be seen or measured.

________________ The pressure of the blood against the walls of the arteries.

________________ Normal is 98.6F or 37.0C

________________ If its pale it can mean low blood pressure.

________________ The level of the patient's awakeness.

________________ A French word meaning to sort.

________________ The ability of the body to respond to painful stimuli.

________________ To check the airway, breathing, and circulation.

________________ Head to toe survey.

________________ Life threatening category.

________________ Patient is serious but will not die if not treated immediately.

________________ Patient can wait.

________________ The diagnostic sign that responds to light.

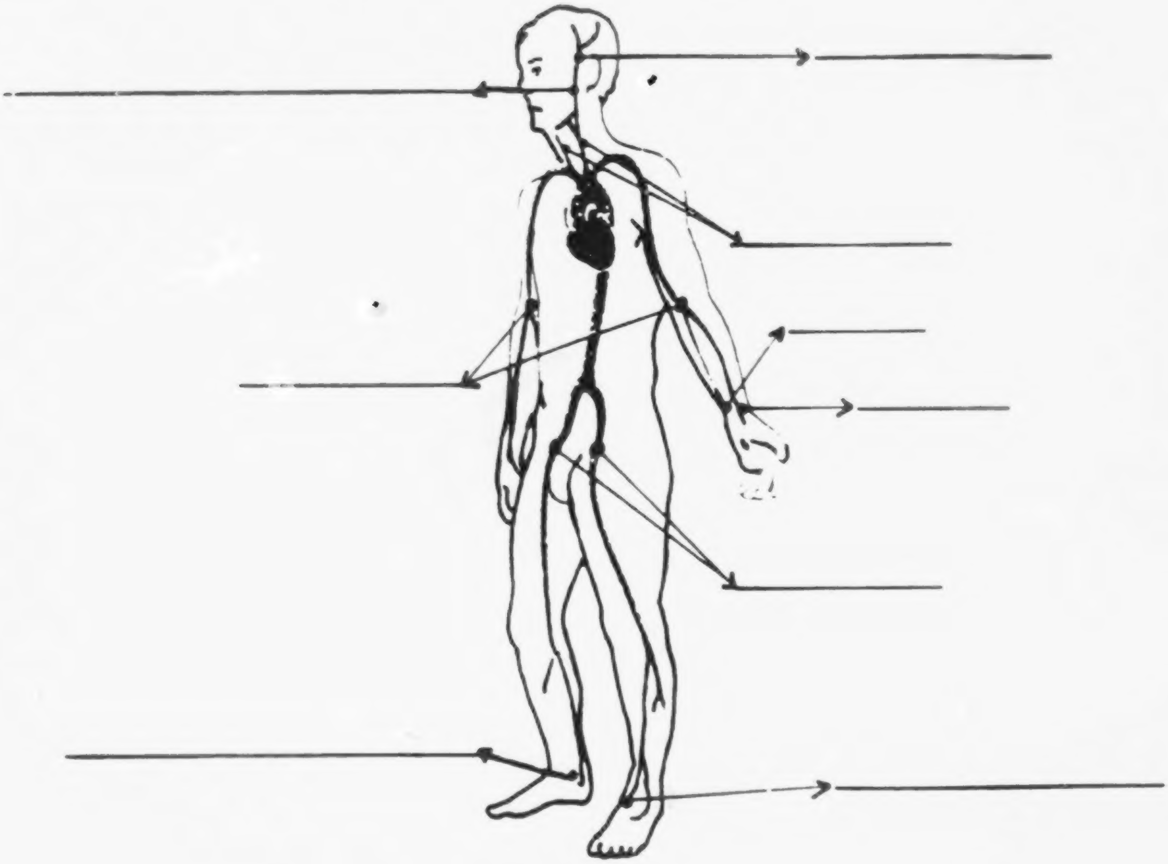
________________ "Wiggle your toes."

True or False You are completing your secondary survey on your patient. The patient suddenly stops breathing. You would stop your survey and assist you patient in breathing.

Pressure Point Terms

- temporal
- external maxillary
- pedal or dorsalis pedis
- posterior tibial
- radial
- carotid
- brachial
- ulnar
- femoral

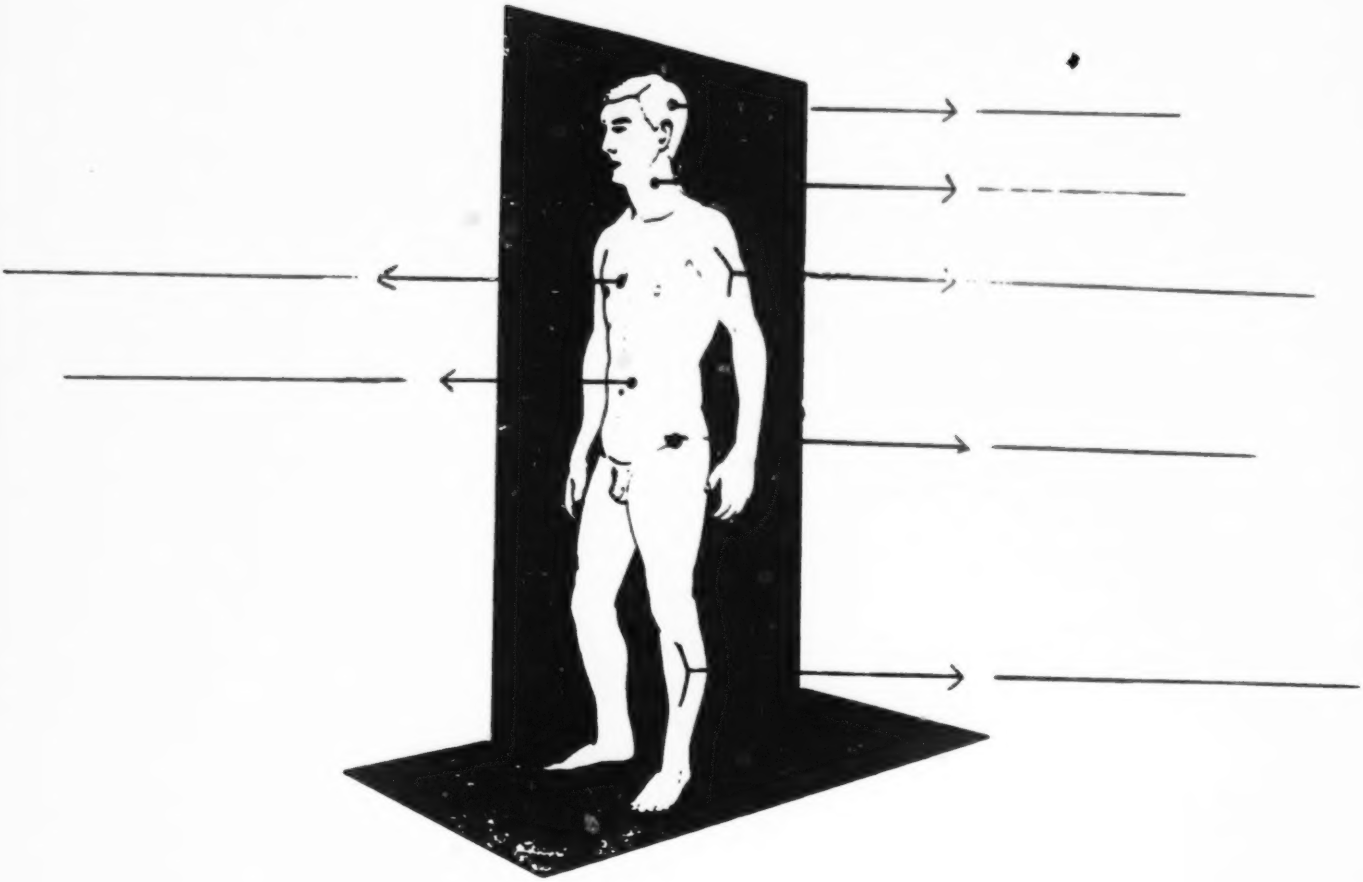
Label the diagram below by writing the correct pressure point name on the line next to the appropriate pressure point.



Page 3 (EMT-Mastery Test #2)

Label the diagram below by writing the correct term on the line next to the appropriate body part.

head	abdomen
neck	pelvis
thorax	lower extremity
upper extremity	



EMERGENCY MEDICAL AIDE

Student Name______________________________ Date:____________

Class Location:____

Instructor:____

Mastery Test #3

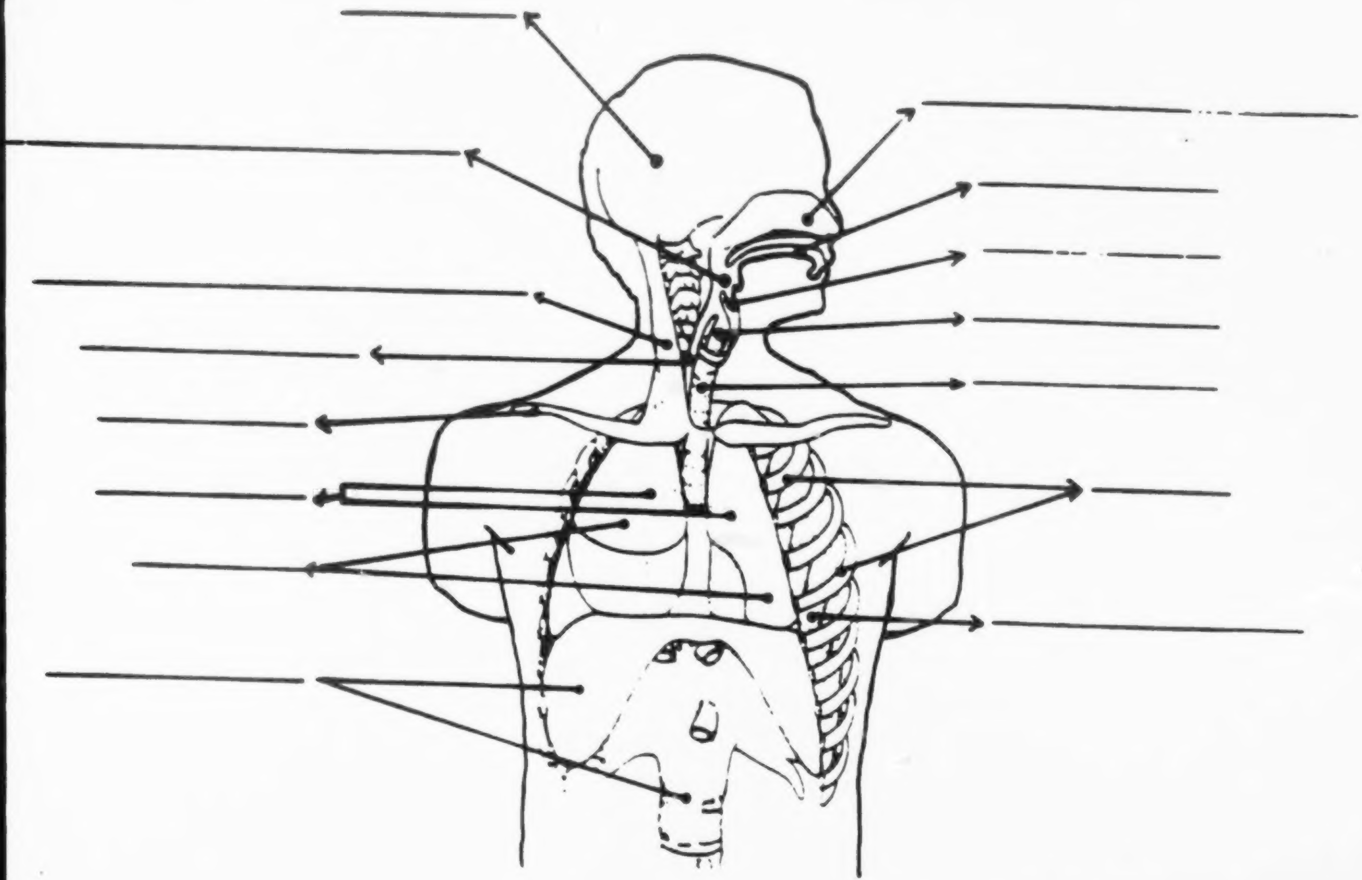
Cardiorespiratory System

Label the diagram below by writing the correct term on the line next to the appropriate body part.

skull
clavicle
diaphragm
larynx

throat-pharynx
bronchi
mouth
trachea
intercostal muscles
nasal air passages
sternoceidomastoid muscle

esophagus
lungs
epiglottis
ribs



1. The function of the respiratory system is to provide ______________________ to the body and to remove carbon dioxide.

2. List the steps to follow in the care of any patient with a chest injury.

3. Write each of the following terms next to the correct definition.

rib fracture
perfusion
platelet
dilation
vein
cardiogenic
hyppovolemic
neurogenic
dyspnea

flail chest
RBC
pulse
constriction
epistaxis
metabolic
psychogenic
pleural space
perfusion

dyspnea
WBC
blood pressure
artery
respiratory
septic
anaphylactic
"A-B-C"
mast suit

systemic circulation
medulla oblongata
impaled foreign object
closed chest injury

pulmonary circulation
sucking chest wound
open chest injury

pneumatic counter pressure device
The three major causes of shock and changes in blood pressure.

______________________ Broken rib.

______________________ Two or more ribs broken in three or more places.

______________________ Blood cell causing clotting of the blood.

______________________ Blood vessel that carries blood to the heart.

____________________ The pressure of the blood against the walls of the arteries.

____________________ Difficult breathing.

____________________ Shock from a severe allergy causing wheezing, hives, and a rapid drop in blood pressure.

____________________ Shock from a simple fainting.

____________________ Blood flowing through tissues and organs.

____________________ Red blood cell - carries oxygen.

____________________ Shock from heart failure.

____________________ Shock from an upset in body chemistry.

____________________ Shock from an interruption in oxygen supply.

____________________ Pulsation of artery from the heart pumping.

____________________ Shock from severe infection.

____________________ Primary survey.

____________________ Object stuck in a body.

____________________ Blood vessel that carries blood away from the heart.

____________________ The heart, the blood volume, and peripheral resistance.

____________________ Device to reduce shock.

____________________ Shock due to neurological damage.

____________________ Nosebleed.

____________________ Blood vessel becoming smaller in diameter.

____________________ Blood vessel becoming larger in diameter.

____________________ Blood cell that fights infection.

______________________ Open chest wound causing hissing sound.

______________________ Circulation to and from lungs.

______________________ Channels through which the nutrient fluids of the body circulate.

______________________ Difficult breathing.

______________________ Vital sign center in the brain.

______________________ Space between the two layers of the pleural membrane.

______________________ Chest injury without any external wound.

______________________ Chest injury with an external wound.

The following statements are either TRUE or FALSE. Place the letter "T" next to true statements, and an "F" next to statements that are incorrect.

____ Chest injuries are always serious because the heart and lungs are vital to life.

____ The heart is the pump in the human body.

____ Arteries leave the heart.

____ Veins return blood to the heart.

____ Capillaries exchange oxygen and carbon dioxide.

____ 90-160/60-90 is a normal range of blood pressure.

____ A newborn's blood volume may be 300cc, while and adult may be six liters.

____ Arteries spurt, veins flow, and capillaries ooze.

____ A patient showing signs of shock may be bleeding internally or externally.

____ Three basic methods to control bleeding are, direct pressure and elevation, pressure point, and tourniquet.

____ No tissue damage could result from improperly used tourniquets.

____ Signs of shock are drop in blood pressure, increase in pulse, shallow rapid respirations, anxiety, profuse sweating, and thirst.

____ Shock is treated by securing an open airway, giving oxygen, supine position, monitoring vital signs, reassuring patient, and transporting STAT.

____ Oxygen is never used for a patient in shock.

EMERGENCY MEDICAL AIDE

Student Name: ______________________________ Date: ____________

Class Location: ____

Instructor: ____

Mastery Test #4

Musculoskeletal System

DIRECTIONS: Write each of the following terms next to the correct definition.

ecchymosis
puncture
pressure dressing
dislocation
open fracture
strain

abrasion
avulsion
fracture
spinal cord
closed fracture
displaced fracture

hematoma
laceration
sprain
joint

non-displaced fracture
impaled foreign objects
paralysis, pain, anesthesia
treatment for open wounds
stabilize and immobilize

______________________ An extension of the brain which is protected by the spinal column.

______________________ Scrape.

______________________ Sign of spinal cord injury.

______________________ Extensive bruising.

______________________ Pulled or torn ligament.

______________________ Lump of blood.

______________________ Penetration.

______________________ Displacement of two bones at their joint.

______________________ A cut - smooth or jagged.

______________________ Object stuck in the body.

______________________ A broken bone.

______________________ A flap or a piece of soft tissue torn off body.

______________________ A dressing used to control bleeding.

________________________ A fracture where the skin is lacerated.

________________________ A fracture where the skin is NOT lacerated.

________________________ Impaled objects.

________________________ Where two bones come together.

________________________ A pulled muscle.

________________________ A fracture out of alignment.

________________________ A fracture NOT out of alignment.

The major functions of the skin are to protect the body from infection and to ____________________ body temperature.

A ligament connects ___________________ to ___________________ and a tendon connects muscle to ____________________________.

Bleeding may be controlled by three basic methods. Circle the INCORRECT method below:

a. Direct pressure and elevation.

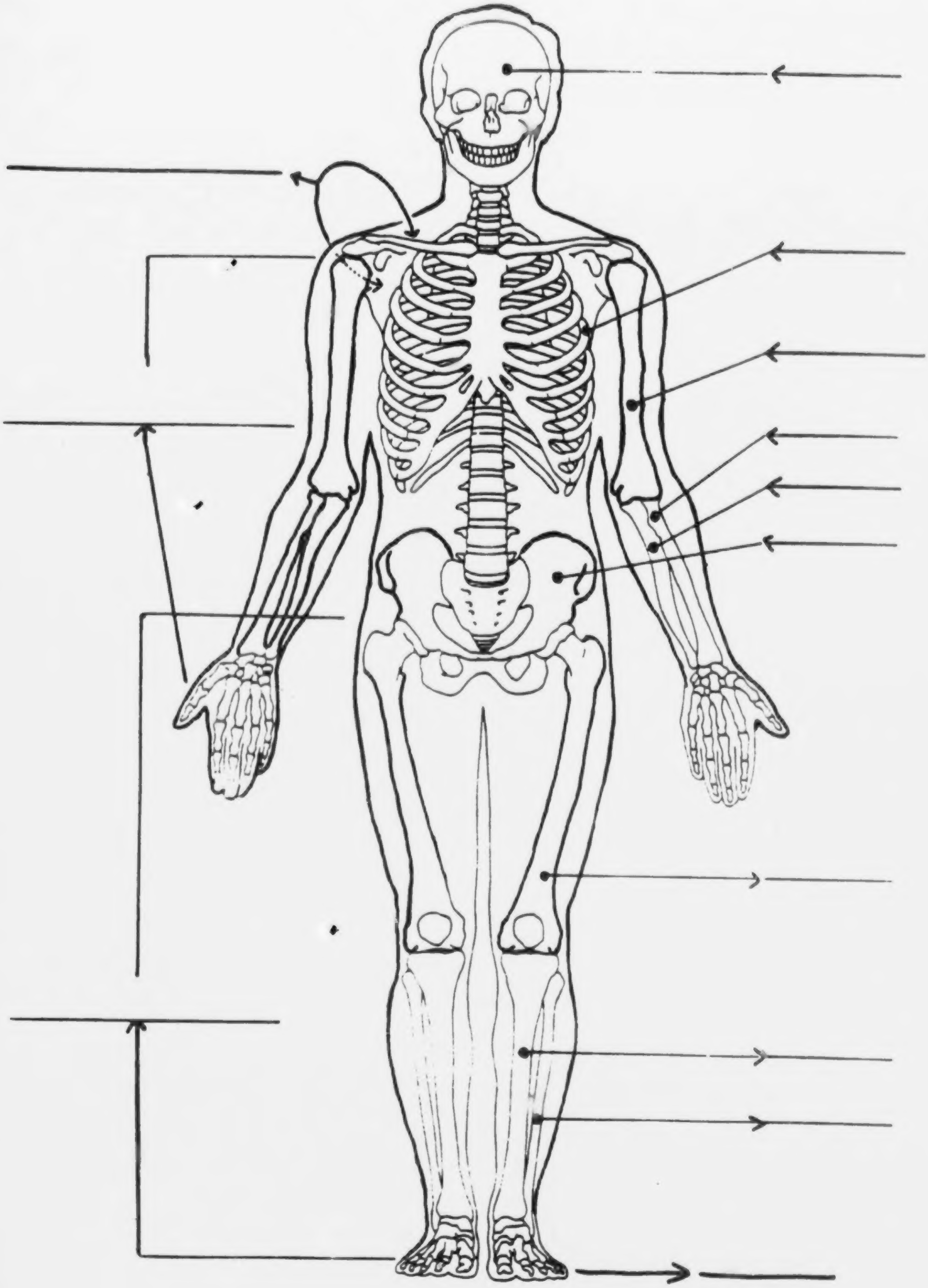
b. Pressure points.

c. Suturing.

d. Tourniquet.

LABEL the diagram of the skeletal system on the next page by writing the correct term on the line next to the appropriate body part:

shoulder girdle
foot
femur
ulna
skull
upper extremity
fibula
pelvis
humerus
lower extremity
tibula
radius
thorax



The following statements are either TRUE or FALSE. Write "T" next to the statements that are true, and "F" next to the statements that are incorrect.

____ The epidermis and the dermis are the upper and lower layers of the skin.

____ Insertion is the attachment of a muscle.

____ Origin is the fixed attachment of a muscle.

____ Open soft tissue wounds are treated by controlling bleeding, preventing further contamination, and immobilization.

____ Treatment for an impaled foreign object is to stabilize and immobilize.

____ An occlusive dressing covers a sucking chest wound.

____ Four signs of a fracture are pain, swelling, ecchymosis, and exposed bone.

____ Two signs of a dislocation are paradoxical motion and severe pain.

____ An injured limb should never be checked for a distal pulse or other neurovascular parameters.

____ A driving accident may cause a spinal injury.

____ Pain, anesthesia, and paralysis may be signs of a spinal injury.

EMERGENCY MEDICAL AIDE

Student Name: ______________________________ Date__________

Class Location____

Instructor:____

MASTERY TEST #5

Nervous System

DIRECTIONS: Write each of the following terms next to the correct definition.

-CNS
-airway
-airway obstruction
-peripheral nervous system
-autonomic nervous system
-chemical burns of the eyes

________________	Greatest danger to patient in facial injuries.
________________	Flush with water.
________________	Central nervous system.
________________	First consideration in evaluating facial injuries.
________________	Motor and sensory nerves.
________________	Regulates functions of the body not controlled by voluntary will.

Burns of the eye are treated by ____________ with water.

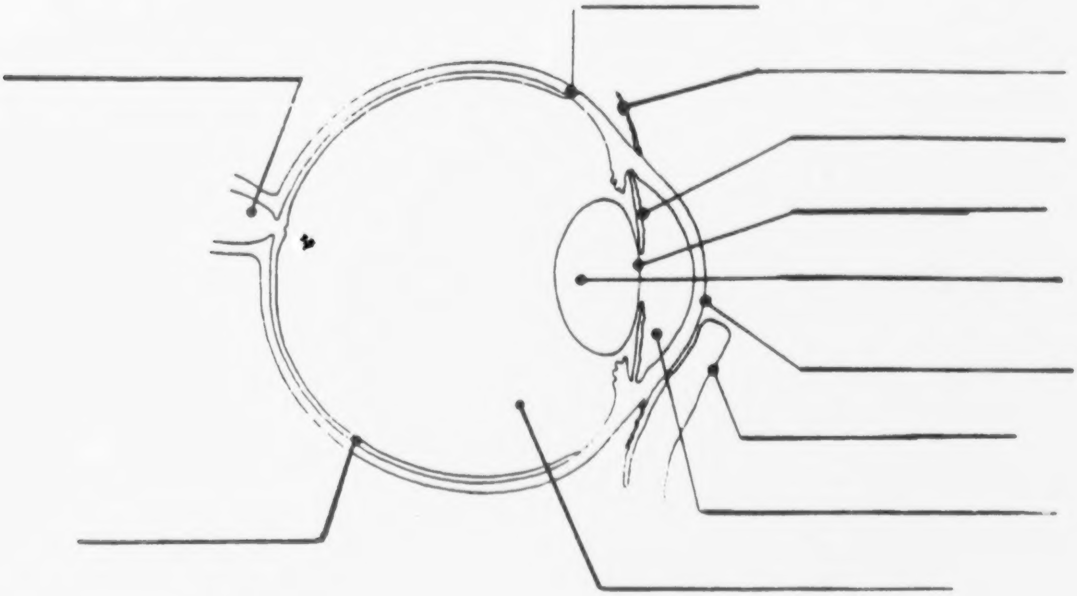
___________ eye(s) should be covered when treating lacerations of the eye.

An obstructed airway MAY / MAY NOT (circle one) be a result of a facial or throat injury.

The main consideration in treating a scalp, facial, and throat injury is to maintain an open ________________.

Label the diagram below by writing the correct term on the line next to the appropriate body part.

optic nerve
conjunctiva
lens
aqueous humor
retina
iris
cornea
vitreous humor
sclera
pupil
eyelid



EMERGENCY MEDICAL AIDE

Student Name: ______________________________ Date __________

Class Location ____

Instructor: ____

MASTERY TEST #6

Gastrointestinal and Genitourinary Systems

DIRECTIONS: Label each organ below with an S for solid or an H for hollow.

________ liver

________ spleen

________ adrenal glands

________ small intestine

________ rectum

________ large intestine

________ urinary bladder

________ gall bladder

________ bile duct

________ ureter

________ appendix

________ stomach

________ pancreas

________ duodenum

________ kidney

DIRECTIONS: Write each of the following terms next to the correct definition.

peritoneum
peristalsis
digestion
evisceration
peritonitis
bleeding
rigidity and tenderness

__________________ The process of breaking down food which can then be absorbed by the intestine.

__________________ Wave like movement of the gastrointestinal tract.

__________________ Complication of solid organ injuries.

__________________ Severe infection due to hollow organ injuries.

__________________ The protruding of an internal organ through a wound.

__________________ Signs and symptoms of an acute abdomen.

__________________ Membrane lining the abdominal pelvic walls.

The Genitourinary System and Injuries

DIRECTIONS: The following statements concerning genital function are either true (T) or false (F). Mark accordingly.

_____ Urine and semen can pass through the urethra together.

_____ Urine and semen are the only materials normally discharged by the male penis.

_____ Erictile tissue, a vascular tissue, causes the penis to distend into an erect structure.

_____ Permanent penile erection does not occur.

_____ During intercourse, penile discharge is made up of sperm, prostatic fluid and semen alone.

_____ A mature egg or ovum is released by the human ovary approximately every 28 days.

_____ A fertilized egg normally settles into a specialized lining within the fallopian tube to develop into a child.

_____ The vagina connects the uterus and the external female genital the vulva.

_____ Male or female hormones are absorbed directly into the blood stream from testis or ovary.

_____ The menstrual period is the start of the female reproductive cycle.

_____ Endometrium is the lining of the uterus, shed as menstrual flow if a discharged egg in not fertilized.

_____ A mature egg is discharged from the ovary into a fallopian tube approximately 15 days after the menstrual flow ceases.

_____ Menstrual cycles once started persist throughout the lifetime of the female until she dies.

_____ Endometrium within the uterus grows prior to the menstrual period to prepare a bed for a fertilized egg.

_____ Endometrium can be shed and replaced roughly 12 times a year.

_____ Unremitting penile erection is priapism.

______ If a sperm and ovum unite, a menstrual period follows.

______ A mature ovum is discharged from an ovary and reaches the uterus through the fallopian tubes.

______ Vaginal foreign bodies or those in the female perineum or external genitalia must be removed.

DIRECTIONS: Mark the following statements concerning injuries of the female genitalia either TRUE or FALSE.

______ A 6-months pregnant female wearing a lap seat belt improperly may sustain a uterine rupture and severe hemorrhage in a motor vehicle accident.

______ In general, injuries of internal female genitalia are common, and the EMT is in a position to offer significant emergency medical care.

______ Since the internal female genitalia are not in contact with the bony pelvis, they are not often injured if it is fractured.

______ Shock is common in the pregnant female with severe blunt abdominal injury.

______ The external female genitalia include the labia (major and minor), the vulva, the clitoris, the vagina, and the cervix.

______ All common soft tissue injuries may involve the female external genitalia.

______ Bleeding from external female genital wounds is not common.

______ The best dressings for wounds of the external female genitalia are local sterile pressure bandages held by diaper-type dressings.

______ Vaginal packs are a convenient way to control hemorrhage from external genital wounds in the female, and are used freely.

______ Uniformly, injuries of the external genitalia in the female are painful but not life-threatening.

______ Severe hemorrhage from the vagina may be controlled by local pressure, a pressure dressing, and elevation of the legs.

_____ Hysteria and fear may indicate that these patients be assigned to triage category 1 for transport.

_____ Patients with a suspected rupture of the uterus should be assigned to triage category 1 for transport.

DIRECTIONS: Complete the following statements by writing the appropriate word in the blank space provided.

1. Three steps in the general care of abdominal injuries are:

   a. ________________________________

   b. ________________________________

   c. ________________________________

2. An evisceration is covered with a sterile moist saline ______________________.

3. A ____________________ organ tends to bleed when injured.

4. A ____________________ organ can cause peritonitis.

5. A patient with an abdominal injury should be treated for ______________________.

6. An impaled object in the abdomen should be stabilized and ______________________.

7. An injury where skin is lacerated is called an __________ injury.

8. An injury where skin is NOT lacerated is called a ____________________ injury.

EMERGENCY MEDICAL AIDE

Student Name: ______________________________ Date __________

Class Location ______________________________

Instructor: ______________________________

MASTERY TEST #7

Common Medical Emergencies

DIRECTIONS: Write each of the following terms next to the correct definition.

- -insulin shock
- -coronary arteries
- -diabetic coma
- -AMI
- -CHF
- -CVA
- -ASHD
- -angina pectoris
- -convulsion

- -obesity/smoking/hypertension
- -communicable disease
- -care for stroke patient

__________________ Heart disease or hardening of the arteries.

__________________ Risk factors associated with heart disease.

__________________ Chest pain associated with stress or exercise which lasts less than thirty minutes and is relieved by nitroglycerin.

__________________ Congestive heart failure, a heart disease characterized by dyspnea and fluid retention in the lungs and body.

__________________ Acute myocardial infarction, heart attack damage.

__________________ Blood vessels that provide oxygenated blood to the heart muscle.

__________________ Cerebrovascular accident or stroke damage to the brain due to obstruction or rupture of a blood vessel in the brain.

__________________ Decreased LOC, warm dry skin, increased thirst, high level of sugar and ketone bodies in the blood.

____________________ Cold clammy skin, sudden fainting, convulsions and death due to lack of sugar to feed the brain.

____________________ A series of involuntary contractions of the skeletal muscles.

____________________ A disease that can be transmitted from one person to the next.

____________________ Observation of vital signs, respiration, pulse, and blood pressure.

List three (3) signs of a heart attack.

1. ____

2. ____

3. ____

List three (3) signs of a stroke.

1. ____

2. ____

3. ____

A convulsing patient should be protected from______________.

Very energetic handling of the stroke patient by the EMT or the family may aggravate the stroke.

True or False

In general, the most frequent treatment for an unconscious patient usually involves administering CPR.

True or False

Name three modes of transmission of a communicable disease.

1. ____

2. ____

3. ____

Name two steps an EMT should do after transporting a patient with a communicable disease.

1. ____

2. ____

Name three possible reasons for unconsciousness in a patient.

1. __________________________

2. __________________________

3. __________________________

A patient having a convulsive seizure, must be kept from injury during the attack, and the EMT must assume an open airway and proper respiration during the unconscious state.

True or False

EMERGENCY MEDICAL AIDE

Student Name:______________________________ Date:____________

Class Location:____

Instructor:____

MASTERY TEST #8

Childbirth and Common Pediatric Emergencies

1. The three stages of labor are:

   1. contractions
   2. delivery of the ___________________
   3. delivery of the baby.

2. Contractions are measured from the ______________________ of one contraction, to the _________ of the next.

3. Name three (3) procedures to follow when the baby is born.

   1. ____
   2. ____
   3. ____

4. Name three (3) causes of shock in children.

   1. ____
   2. ____
   3. ____

5. Write the term next to the correct meaning.

   crowning breach large blood clots

   _______________hemorrhage

   _______________foot presentation

   _______________head presentation

6. What would you do in the event of a stillborn birth?

DIRECTIONS: Write each of the following terms next to the correct definition.

infant child croup
epiglottitis SIDS child abuse

treatment of fever in a child
poison control center or 911
birth of baby is imminent
treatment for pregnant woman with convulsions

______________________________ The place to call when a child has swallowed poison.

______________________________ Inflammation of the epiglottis causing airway obstruction.

______________________________ Sudden Infant Death Syndrome - unknown cause of crib death in infants.

______________________________ Bathe in tepid water.

______________________________ A young child from the end of the newborn period (4 weeks) to the age of 12 months.

______________________________ A physically or emotionally abused child.

______________________________ Acute obstruction of the larynx with a barking cough.

______________________________ A young human from infancy to puberty.

______________________________ Soft cloth between back teeth, maintain clear airway, patient placed on side, suction mouth.

______________________________ Labor pains, water sac breaks, bloody show.

Two causes of abdominal pain in children are:

1. ________________ 2. ____________________

If a child swallows lye, do not induce vomiting.

True or False

EMERGENCY MEDICAL AIDE

Student Name: ______________________________ Date: ____________

Class Location: ____

Instructor: ____

MASTERY TEST #9

Drug and Alcohol Abuse

1. Three commonly used depressant drugs are:

    1. __________________

    2. __________________

    3. __________________

    These drugs drugs have the ability to _________________ the central nervous system so that the individual may appear to be peaceful and drowsy.

2. Two commonly used stimulant drugs are_________________ and ______________________. Withdrawal from those drugs can produce severe depression, coma, and ______________.

3. Hallucinogenic drugs can produce dangerous psychiatric symptoms. ____________________ is a commonly used hallucinogenic drug.

4. State four signs of drug withdrawal.

    1. ____

    2. ____

    3. ____

    4. ____

5. Alcohol slows reflexes and decreases reaction time. ___% of all traffic fatalities are related to drunk drivers.

6. ________________ and ___________________ are severe signs of alcohol withdrawal.

DIRECTIONS: Write true or false next to the following statements.

__________ Alcoholism is the disease that can affect men, women, and children of all ages and socioeconomic groups.

__________ Other illnesses or conditions can be mistaken for alcohol intoxication.

__________ Alcohol is a gastric (stomach) irritant.

__________ Patients who abuse street drugs often abuse more than one drug.

EMERGENCY MEDICAL AIDE

Student Name:______________________________ Date:___________

Class Location:____

Instructor:____

Mastery Test #10

Common Environmental Injuries

1. Which of the following is NOT a common cause of heat injury?

   a. chemical burns　　c. electrical burns
   b. thermal burns　　d. nuclear burns

2. Which of the following is NOT a function of the skin?

   a. protects the body from its environment
   b. controls temperature
   c. retains fluid
   d. provides skeletal support

3. A burn that shows reddening and blister formation would be BEST classified as which of the following:

   a. first degree　　c. third degree
   b. second degree　　d. fourth degree

4. Third-degree burns are not painful because the nerve ends are burned.

   True　　False

5. Using the rule of "nines", calculate the percentage body burn of an adult with burn on his entire trunk, abdomen, back and chest.

   a. 9%　　b. 18%　　c. 36%　　d. 50%

6. In calculating the percentage of body burn for an infant, which of the following statements is CORRECT?

   a. The same formula is used for infants as for adults.
   b. The head makes up a higher percentage of the body of an infant.

   c. The arms make up a higher percentage of the body of an infant.

   d. The trunk makes up a higher percentage of the body of an infant.

7. Which of the following burns would be considered critical (severe) burns?

   a. A 20%, full-thickness burn, including the face and mouth.

   b. A 5%, full-thickness burn of the buttocks.

   c. A second-degree burn involving the entire left leg.

   d. A third degree burn of the patella.

8. Which is the best substance with which to dress a burned wound?

   a. a sheet wet with sterile saline
   b. a dry, sterile sheet
   c. an anesthetic ointment
   d. a sterile sheet wet with hot water

9. The best immediate treatment for a first or second degree burn of less than 20% of the body surface is to immerse the part immediately in cold water.

   True or False

10. Your are called to a scene of a fire. The Fire Department has brought out a man who has been severely burned about the shoulders, chest, neck, and face. Your initial assessment reveals probable third-degree burns of these areas. Listed below are four steps that you would take. Re arrange these steps by numbering them in the correct order.

    ____ a. Cover the burned areas with sterile dressing.

    ____ b. Transport the patient immediately to the hospital.

    ____ c. Place the patient in the shock position.

    ____ d. Open the airway and make sure he is ventilating properly.

11. Following emergency treatment of a chemical burn to the eye, only the injured eye should be patched.

    True or False

12. You are called to an emergency scene near a utility pole, where a line man has been found lying on the ground, having fallen from the pole. His co-workers report that he sustained a severe electric shock and was thrown to the ground. In addition to performing basic life support and establishing an airway, what additional steps should you now take to confirm whether he did or did not have an electrical burn?

____ a. Inspect him for a serious, extensive, full-thickness, third-degree burn.

____ b. Inspect him for a tiny, charred, burned wound of entry.

____ c. Look for two burned areas, one where the current entered and one where it left his body.

____ d. You should not touch him, because, even though he is no longer touching the wire, he may still be electrically alive.

13. The greatest immediate risk of a high-voltage electrical burn is:

____ a. The immediate risk of developing cardiac arrhythmia or respiratory arrest.

____ b. The immediate risk of loss or limb from the burn.

____ c. The immediate risk of developing tetanus from the burn.

____ d. Electrical burns are no different in their risk than thermal burns.

14. You are called to a scene at the seashore. A young woman, attempting to improve her suntan, has been found to have sunburn over 90% of her body. Which of the following statements is most correct about this situation?

____ a. She is seriously burned.

____ b. She does not have significant injury.

____ c. She may show some mild hypotension, but is not in serious danger.

____ d. She has a 90% second-degree burn.

15. You are called to a high school football game. The temperature is 90 degrees, it is a humid day. Your are called to see a spectator who has collapsed. He has been standing in the shade. You find him breathing evenly, talking, sweating profusely, and cool to the touch. You may assume that this patient has:

____ a. heat stroke ____ b. neurogenic shock ____ c. heat exhaustion

16. You are called back to the same stadium during the same game. One of the players has collapsed on the field. He is lying in the bright sun. You notice that his skin is hot and dry, he is not perspiring, and he is not responding to verbal stimuli. His pulse is 120 and strong. You may assume that this patient is suffering from:

____ a. heat exhaustion

____ b. heat cramps

____ c. cardiac arrhythmia

____ d. heat stroke

17. The patient described here is not sweating because:

____ a. He has not generated enough body heat to sweat.

____ b. He has lost so much fluid that he cannot sweat.

____ c. His temperature is so high that his sweat evaporates immediately.

____ d. His body mechanisms for sweating have been overwhelmed.

18. Which of the following statements best describes the situation in question #17?

____ a. Not serious because once the patient is unconscious, he will rapidly recover.

____ b. Not serious because, given enough time, the patient will recover.

____ c. Extremely serious because, if left untreated, the patient will die.

____ d. Not serious because the patient is not sweating.

19. What is the immediate emergency treatment for the patient mentioned in question #18?

____ a. Cover him with blankets and administer fluid by mouth.

____ b. Cover him with blankets and get him out of the sun.

____ c. Transport him immediately to the hospital.

____ d. Cool him immediately this sheets wet with cold water.

20. The specific cause of heat cramps has been proven to be loss of body electrolytes.

True or False

21. "Drowning" is suffocation in or under water.

True or False

22. "Breath-holding blackout" is a blackout that occurs under water because of hypoxia when the swimmer does not realize the need to take a breath.

True or False

23. The determining factors which will influence the possible recovery of a drowning victim are:

1. The ______________ of the rescue.
2. The immediate clearing of the person's ____________.
3. The immediate initiation of artificial ventilation with supplemental ____________________.
4. The innate ability of the person to ______________.
5. The kind of ______________ in which the accident occurred.

24. List three types of water accidents which could cause a swimmer to panic.

a.____________ b.________________ c.______________

25. A swimmer with a spinal injury is often found face down in the water.

True or False

26. The steps to follow for a drowning victim with a suspected neck injury are as follows:

a. Turn the patient in the water while supporting the __________ and ____________ as one unit.

b. Institute artificial ventilation at one without waiting to ________________ the patient from the ____________.

c. Continue ___________________ while a _______________ __________________ is floated under the patient, maintaining support of the head and neck until the board is in place.

d. The secured patient is ready for _________________.

27. The treatment of a patient suffering from decompression sickness is basic life support, and the definitive treatment is recompression.

True or False

28. Write the correct statement next to its appropriate definition:

Poison
Poisoning occurs.
Systems of the body affected by poison.
Categories of poison.
Treatment for rabies.
Vomiting should not be induced.
Treatment for surface poisoning.
Treatment for ingested poisoning.
Brown recluse spider bite.
Reaction to an insect bite/sting.
Black widow spider bite.
Bees, wasps, ants, and spiders.
Three carriers of rabies.

____________________________ Poisons, stings, and bites.

____________________________ Any substance that can produce a harmful effect on the body processes.

____________________________ Dogs, squirrels, and raccoons.

____________________________ Results from ingestion, inhalation, injection, surface contact absorption through the skin and mucous membranes of substances in toxic amounts.

____________________________ The patient is unconscious or semiconscious, or convulsing, poison is strongly corrosive, poison contains a petroleum product.

____________________________ Dust off area, then wash with soap and water, or flooding area under a shower.

____________________________ Dilute the poison in the stomach and then induce its removal by vomiting.

______________________________ Circulatory, gastrointestinal, central nervous system, and skin.

______________________________ Common classes of insects that can cause painful or harmful bites.

______________________________ Sudden pain, swelling, heat, and redness around affected area.

______________________________ A series of inoculations that may prevent the rabies from developing in a human who has been bitten by a rabid animal.

______________________________ Boardlike rigidity of the abdominal muscles.

______________________________ Local severe tissue damage that can lead to an ulcer.

ANSWERS

EMERGENCY MEDICAL AIDE

Student Name:______________________________ Date:____________

Class Location:____________________________

Instructor:________________________________

Mastery Test #1

The Emergency Medical System

True (T) or false (F):

1. T EMT training programs, dispatch centers, and disaster plans are essential elements of the Emergency Medical System.

2. F Good personal appearance, poor character, and ability to render care are attributes of a good EMT.

RESPONSIBILITY means overall general duty.

CAPABILITY means a skill to carry out responsibilities.

Write "R" for responsibility, or "C" for capability next to the sentence below that reflects the correct definition.

3. C Perform CPR.
4. R Sane and supervised transport.
5. C Treat shock.
6. C Dress and bandage wounds.
7. R Reporting and record keeping.
8. C Splint fractures.
9. R Communication with all persons involved.
10. C Establish open airway.
11. R Care for newborn.
12. C Be able to cope with medicolegal problems.
13. C General control at the scene.
14. R General vehicle and equipment care.
15. C Administer intermittent positive pressure breathing.

16. Define the term "consent".

permission

17. Define the term "implied consent".

When a person is unable to communicate, the EMT assumes they want emergency care.

18. Explain "right to refuse treatment".

An adult individual has the right to refuse emergency care.

19. Explain what is meant by the "Good Samaritan Law".

A person who voluntarily gives care to an injured person is not liable.

20. Who provides consent for a minor? parent

21. List five (5) situations that an EMT is required to report the incident to the proper legal authorities.

(See pg. #7 in the EMT competencies booklet for possible answers)

EMERGENCY MEDICAL AIDE

Student Name:______________________________ Date:___________

Class Location:____________________________

Instructor:________________________________

Mastery Test #2

Anatomy and Triage

DIRECTIONS: Write each term next to the correct definition.

sign
pupil reaction
temperature
primary survey
secondary survey
category 3-green
skin color
pulse
ability to move
reaction to pain
category 2-yellow
state of consciousness
symptom
blood pressure
triage
category 1-red

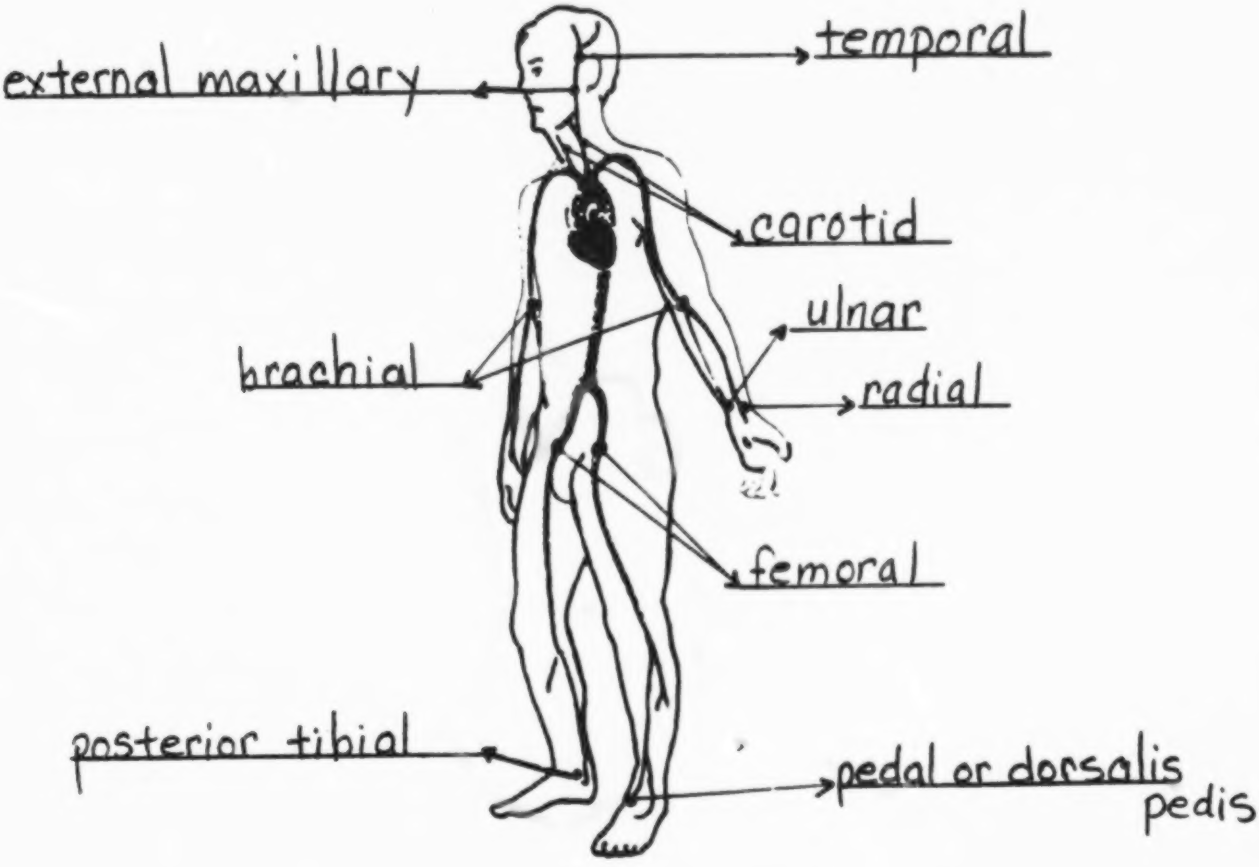
symptom	What a patient feels.
sign	What can be seen or measured.
blood pressure	The pressure of the blood against the walls of the arteries.
temperature	Normal is 98.6F or 37.0C
skin color	If its pale it can mean low blood pressure.
state of consciousness	The level of the patient's awakeness.
triage	A French word meaning to sort.
reaction to pain	The ability of the body to respond to painful stimuli.
primary survey	To check the airway, breathing, and circulation.
secondary survey	Head to toe survey.
#1 red	Life threatening category.
#2 yellow	Patient is serious but will not die if not treated immediately.
#3 green	Patient can wait.
pupil reaction	The diagnostic sign that responds to light.
ability to move	"Wiggle your toes."

True or False You are completing your secondary survey on your patient. The patient suddenly stops breathing. You would stop your survey and assist you patient in breathing.

Pressure Point Terms

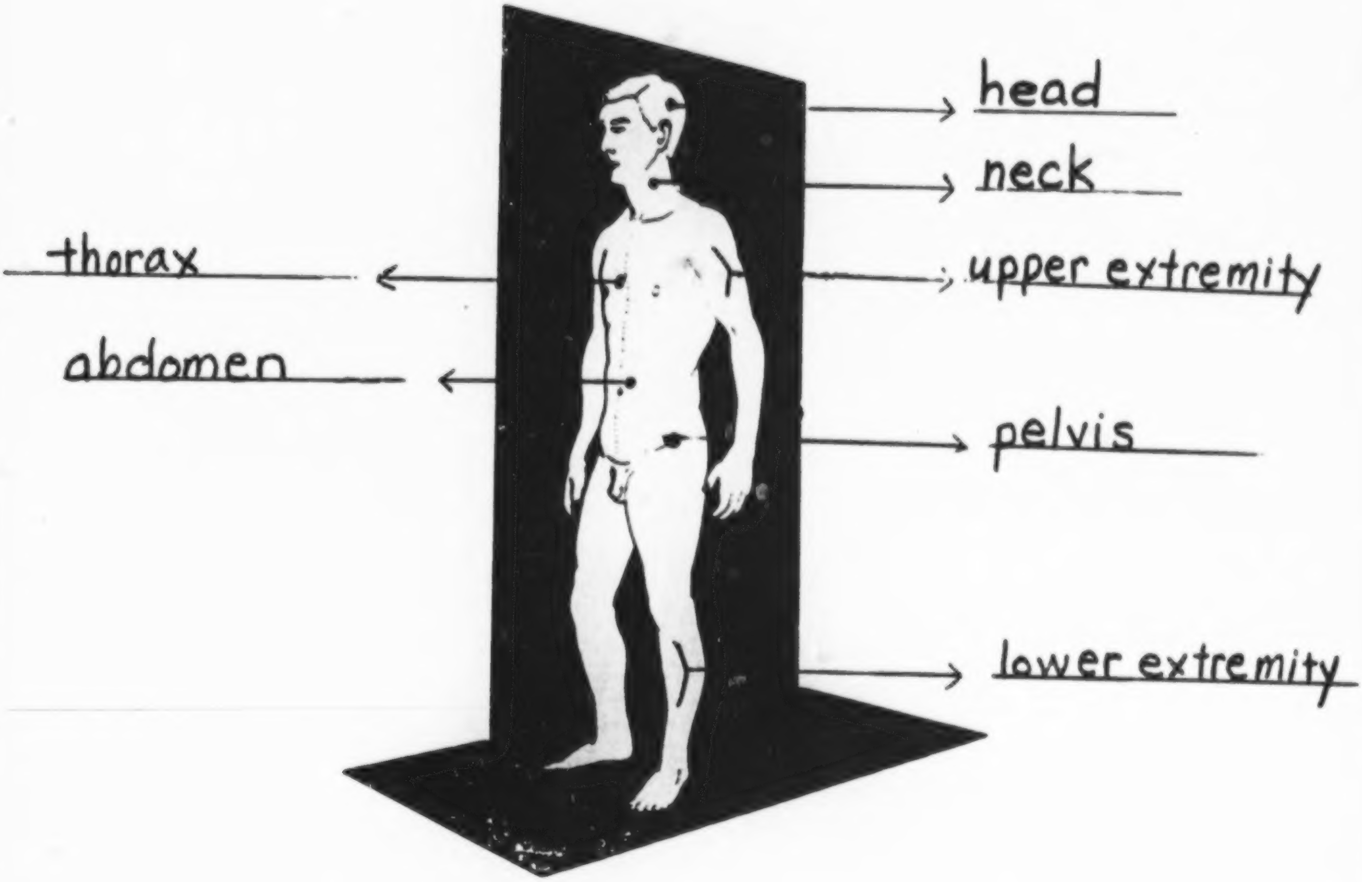
- temporal
- external maxillary
- pedal or dorsalis pedis
- posterior tibial
- radial
- carotid
- brachial
- ulnar
- femoral

Label the diagram below by writing the correct pressure point name on the line next to the appropriate pressure point.


temporal
external maxillary
carotid
ulnar
brachial
radial
femoral
posterior tibial
pedal or dorsalis pedis

Label the diagram below by writing the correct term on the line next to the appropriate body part.

head	abdomen
neck	pelvis
thorax	lower extremity
upper extremity	


head
neck
thorax
upper extremity
abdomen
pelvis
lower extremity

ANSWERS

EMERGENCY MEDICAL AIDE

Student Name____________________________ Date:____________

Class Location:____

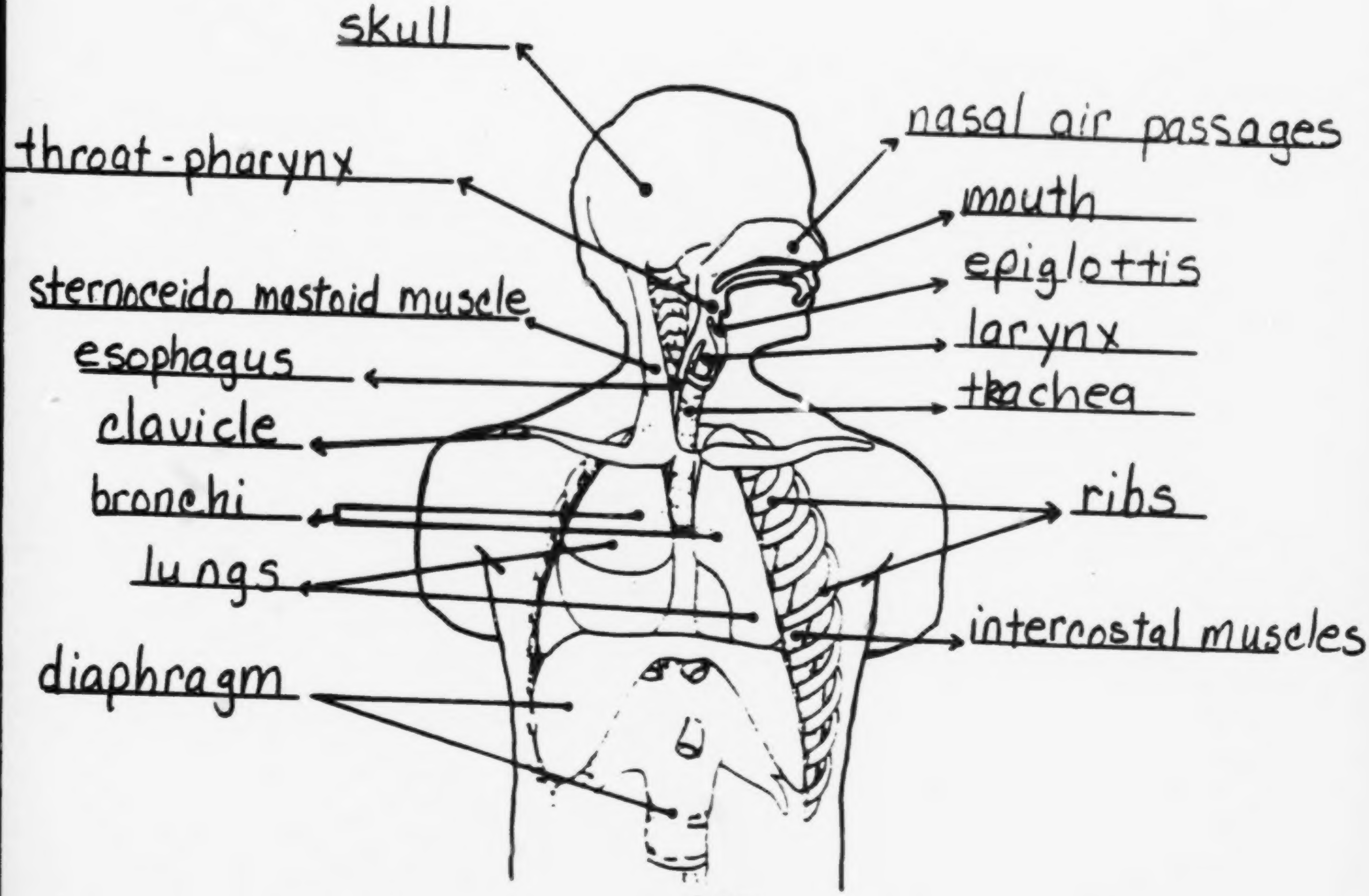
Instructor:____

Mastery Test #3

Cardiorespiratory System

Label the diagram below by writing the correct term on the line next to the appropriate body part.

skull
clavicle
diaphragm
larynx
throat-pharynx
bronchi
mouth
trachea
intercostal muscles
nasal air passages
sternoceidomastoid muscle
esophagus
lungs
epiglottis
ribs


skull
throat-pharynx
sternoceido mastoid muscle
esophagus
clavicle
bronchi
lungs
diaphragm
nasal air passages
mouth
epiglottis
larynx
trachea
ribs
intercostal muscles

Page 2 (EMT-Mastery Test #3)

1. The function of the respiratory system is to provide oxygen to the body and to remove carbon dioxide.

2. List the steps to follow in the care of any patient with a chest injury.

1) secure open airway.
2) control bleeding
3) give oxygen
4) check vital signs every 3-5 minutes.
5) Treat for shock
6) Transport STAT

3. Write each of the following terms next to the correct definition.

rib fracture
perfusion
platelet
dilation
vein
cardiogenic
hyppovolemic
neurogenic
dyspnea

flail chest
RBC
pulse
constriction
epistaxis
metabolic
psychogenic
pleural space
perfusion

dyspnea
WBC
blood pressure
artery
respiratory
septic
anaphylactic
"A-B-C"
mast suit

systemic circulation
medulla oblongata
impaled foreign object
closed chest injury

pulmonary circulation
sucking chest wound
open chest injury

pneumatic counter pressure device
The three major causes of shock and changes in blood pressure.

rib fracture	Broken rib.
flail chest	Two or more ribs broken in three or more places.
platelet	Blood cell causing clotting of the blood.
vein	Blood vessel that carries blood to the heart.

Page 3 (EMT-Mastery Test #3)

blood pressure	The pressure of the blood against the walls of the arteries.
dyspnea	Difficult breathing.
anaphylactic	Shock from a severe allergy causing wheezing, hives, and a rapid drop in blood pressure.
pychogenic	Shock from a simple fainting.
perfusion	Blood flowing through tissues and organs.
RBC	Red blood cell - carries oxygen.
cardiogenic	Shock from heart failure.
metabolic	Shock from an upset in body chemistry.
respiratory	Shock from an interruption in oxygen supply.
pulse	Pulsation of artery from the heart pumping.
septic	Shock from severe infection.
A·B·C	Primary survey.
impaled foreign object	Object stuck in a body.
vein	Blood vessel that carries blood away from the heart.
3 major causes of shock and changes in blood pressure	The heart, the blood volume, and peripheral resistance.
mast suit	Device to reduce shock.
hypovolemic	Shock due to neurological damage.
epistaxis	Nosebleed.
constriction	Blood vessel becoming smaller in diameter.
dialation	Blood vessel becoming larger in diameter.
WBC	Blood cell that fights infection.

sucking chest wound	Open chest wound causing hissing sound.
pulmonary circulation	Circulation to and from lungs.
systemic circulation	Channels through which the nutrient fluids of the body circulate.
dyspnea	Difficult breathing.
medulla oblongata	Vital sign center in the brain.
pleural space	Space between the two layers of the pleural membrane.
closed chest injury	Chest injury without any external wound.
open chest injury	Chest injury with an external wound.

The following statements are either TRUE or FALSE. Place the letter "T" next to true statements, and an "F" next to statements that are incorrect.

T Chest injuries are always serious because the heart and lungs are vital to life.

T The heart is the pump in the human body.

T Arteries leave the heart.

F Veins return blood to the heart.

T Capillaries exchange oxygen and carbon dioxide.

T 90-160/60-90 is a normal range of blood pressure.

T A newborn's blood volume may be 300cc, while and adult may be six liters.

T Arteries spurt, veins flow, and capillaries ooze.

T A patient showing signs of shock may be bleeding internally or externally.

T Three basic methods to control bleeding are, direct pressure and elevation, pressure point, and tourniquet.

F No tissue damage could result from improperly used tourniquets.

T Signs of shock are drop in blood pressure, increase in pulse, shallow rapid respirations, anxiety, profuse sweating, and thirst.

T Shock is treated by securing an open airway, giving oxygen, supine position, monitoring vital signs, reassuring patient, and transporting STAT.

F Oxygen is never used for a patient in shock.

ANSWERS

EMERGENCY MEDICAL AIDE

Student Name:______________________________ Date:____________

Class Location:____

Instructor:____

Mastery Test #4

Musculoskeletal System

DIRECTIONS: Write each of the following terms next to the correct definition.

ecchymosis
puncture
pressure dressing
dislocation
open fracture
strain
abrasion
avulsion
fracture
spinal cord
closed fracture
displaced fracture
hematoma
laceration
sprain
joint

non-displaced fracture
impaled foreign objects
paralysis, pain, anesthesia
treatment for open wounds
stabilize and immobilize

spinal cord	An extension of the brain which is protected by the spinal column.
abrasion	Scrape.
paralysis	Sign of spinal cord injury.
ecchymosis	Extensive bruising.
sprain	Pulled or torn ligament.
hematoma	Lump of blood.
puncture	Penetration.
dislocation	Displacement of two bones at their joint.
laceration	A cut - smooth or jagged.
impaled foreign object	Object stuck in the body.
fracture	A broken bone.
avulsion	A flap or a piece of soft tissue torn off body.
pressure dressing	A dressing used to control bleeding.

open fracture	A fracture where the skin is lacerated.
closed fracture	A fracture where the skin is NOT lacerated.
stabilize and immobilize	Impaled objects.
joint	Where two bones come together.
strain	A pulled muscle.
displaced fracture	A fracture out of alignment.
nondisplaced fracture	A fracture NOT out of alignment.

The major functions of the skin are to protect the body from infection and to control body temperature.

A ligament connects bone to bone and a tendon connects muscle to bone.

Bleeding may be controlled by three basic methods. Circle the INCORRECT method below:

a. Direct pressure and elevation.

b. Pressure points.

[✓ c.] Suturing.

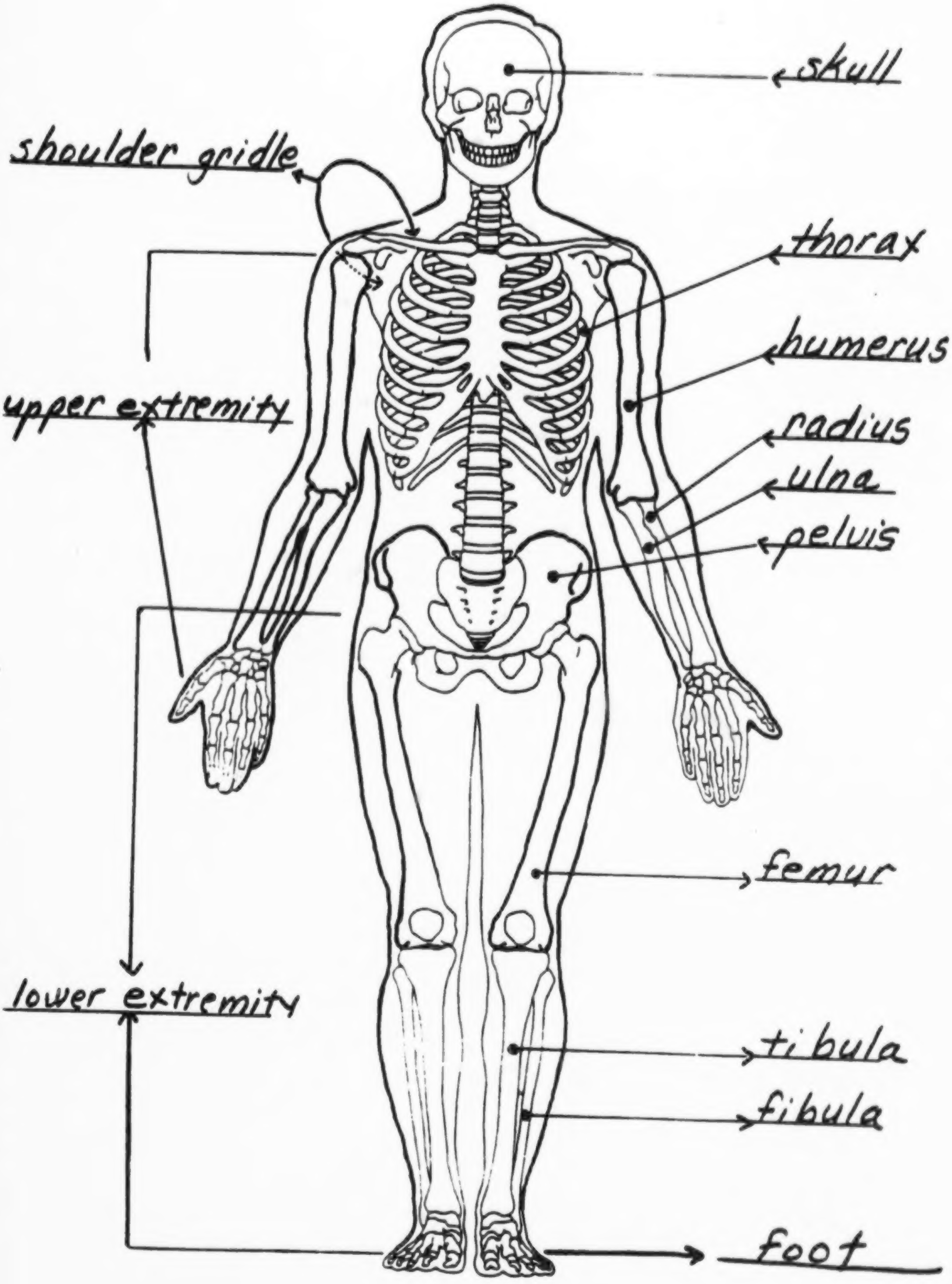
d. Tourniquet.

LABEL the diagram of the skeletal system on the next page by writing the correct term on the line next to the appropriate body part:

shoulder girdle
foot
femur
ulna
skull

upper extremity
fibula
pelvis
humerus

lower extremity
tibula
radius
thorax


skull
shoulder gridle
thorax
humerus
upper extremity
radius
ulna
pelvis
femur
lower extremity
tibula
fibula
foot

The following statements are either TRUE or FALSE. Write "T" next to the statements that are true, and "F" next to the statements that are incorrect.

T The epidermis and the dermis are the upper and lower layers of the skin.

T Insertion is the attachment of a muscle.

T Origin is the fixed attachment of a muscle.

T Open soft tissue wounds are treated by controlling bleeding, preventing further contamination, and immobilization.

T Treatment for an impaled foreign object is to stabilize and immobilize.

T An occlusive dressing covers a sucking chest wound.

T Four signs of a fracture are pain, swelling, ecchymosis, and exposed bone.

T Two signs of a dislocation are paradoxical motion and severe pain.

F An injured limb should never be checked for a distal pulse or other neurovascular parameters.

T A driving accident may cause a spinal injury.

T Pain, anesthesia, and paralysis may be signs of a spinal injury.

ANSWERS

EMERGENCY MEDICAL AIDE

Student Name:_____________________________ Date__________

Class Location____

Instructor:____

MASTERY TEST #5

Nervous System

DIRECTIONS: Write each of the following terms next to the correct definition.

- -CNS
- -airway
- -airway obstruction
- -peripheral nervous system
- -autonomic nervous system
- -chemical burns of the eyes

airway obstruction	Greatest danger to patient in facial injuries.
chemical burn to eyes	Flush with water.
central nervous system	Central nervous system.
airway	First consideration in evaluating facial injuries.
peripheral nervous system	Motor and sensory nerves.
autonomic nervous system	Regulates functions of the body not controlled by voluntary will.

Burns of the eye are treated by flushing with water.

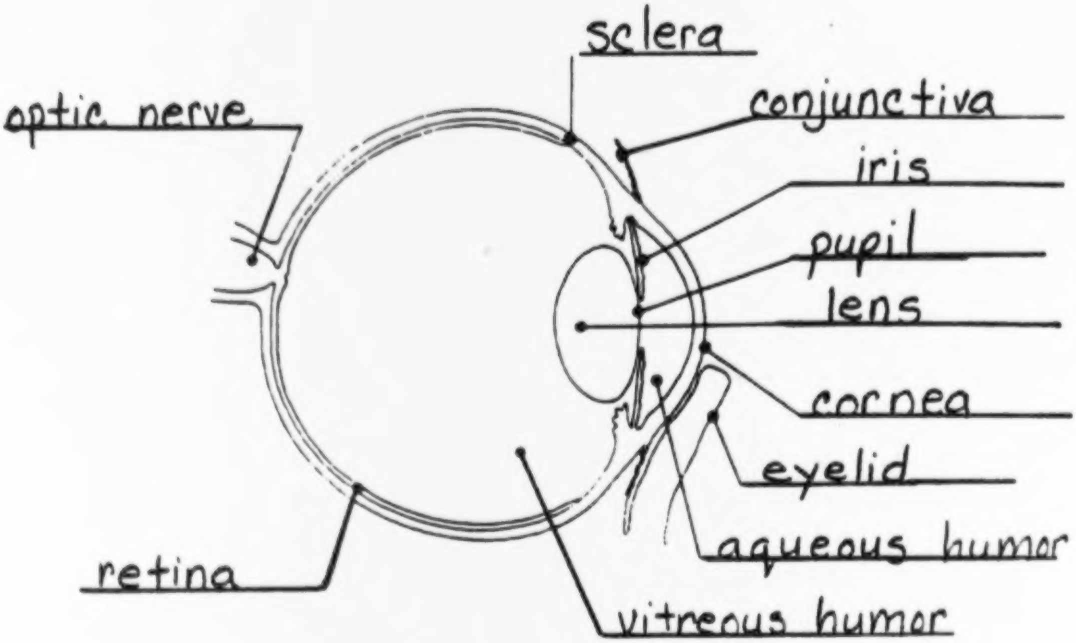
Both eye(s) should be covered when treating lacerations of the eye.

An obstructed airway [✓ MAY] / MAY NOT (circle one) be a result of a facial or throat injury.

The main consideration in treating a scalp, facial, and throat injury is to maintain an open airway.

Label the diagram below by writing the correct term on the line next to the appropriate body part.

optic nerve	retina	sclera
conjunctiva	iris	pupil
lens	cornea	eyelid
aqueous humor	vitreous humor	


sclera
optic nerve
conjunctiva
iris
pupil
lens
cornea
eyelid
aqueous humor
retina
vitreous humor

ANSWERS

EMERGENCY MEDICAL AIDE

Student Name: ______________________ Date__________

Class Location______________________________

Instructor:______________________________

MASTERY TEST #6

Gastrointestinal and Genitourinary Systems

DIRECTIONS: Label each organ below with an S for solid or an H for hollow.

S	liver
S	spleen
S	adrenal glands
H	small intestine
H	rectum
H	large intestine
H	urinary bladder
H	gall bladder
H	bile duct
H	ureter
H	appendix
H	stomach
H	pancreas
H	duodenum
S	kidney

DIRECTIONS: Write each of the following terms next to the correct definition.

peritoneum　　peristalsis　　digestion
evisceration　　peritonitis　　bleeding
rigidity and tenderness

digestion	The process of breaking down food which can then be absorbed by the intestine.
peristalsis	Wave like movement of the gastrointestinal tract.
bleeding	Complication of solid organ injuries.
peritonitis	Severe infection due to hollow organ injuries.
evisceration	The protruding of an internal organ through a wound.
rigidity-tenderness	Signs and symptoms of an acute abdomen.
peritoneum	Membrane lining the abdominal pelvic walls.

The Genitourinary System and Injuries

DIRECTIONS: The following statements concerning genital function are either true (T) or false (F). Mark accordingly.

F Urine and semen can pass through the urethra together.

T Urine and semen are the only materials normally discharged by the male penis.

T Erictile tissue, a vascular tissue, causes the penis to distend into an erect structure.

T Permanent penile erection does not occur.

T During intercourse, penile discharge is made up of sperm, prostatic fluid and semen alone.

T A mature egg or ovum is released by the human ovary approximately every 28 days.

F A fertilized egg normally settles into a specialized lining within the fallopian tube to develop into a child.

T The vagina connects the uterus and the external female genital the vulva.

T Male or female hormones are absorbed directly into the blood stream from testis or ovary.

F The menstrual period is the start of the female reproductive cycle.

T Endometrium is the lining of the uterus, shed as menstrual flow if a discharged egg in not fertilized.

T A mature egg is discharged from the ovary into a fallopian tube approximately 15 days after the menstrual flow ceases.

F Menstrual cycles once started persist throughout the lifetime of the female until she dies.

T Endometrium within the uterus grows prior to the menstrual period to prepare a bed for a fertilized egg.

T Endometrium can be shed and replaced roughly 12 times a year.

T Unremitting penile erection is priapism.

F If a sperm and ovum unite, a menstrual period follows.

T A mature ovum is discharged from an ovary and reaches the uterus through the fallopian tubes.

T Vaginal foreign bodies or those in the female perineum or external genitalia must be removed.

DIRECTIONS: Mark the following statements concerning injuries of the female genitalia either TRUE or FALSE.

T A 6-months pregnant female wearing a lap seat belt improperly may sustain a uterine rupture and severe hemorrhage in a motor vehicle accident.

F In general, injuries of internal female genitalia are common, and the EMT is in a position to offer significant emergency medical care.

T Since the internal female genitalia are not in contact with the bony pelvis, they are not often injured if it is fractured.

T Shock is common in the pregnant female with severe blunt abdominal injury.

T The external female genitalia include the labia (major and minor), the vulva, the clitoris, the vagina, and the cervix.

F All common soft tissue injuries may involve the female external genitalia.

T Bleeding from external female genital wounds is not common.

T The best dressings for wounds of the external female genitalia are local sterile pressure bandages held by diaper-type dressings.

F Vaginal packs are a convenient way to control hemorrhage from external genital wounds in the female, and are used freely.

F Uniformly, injuries of the external genitalia in the female are painful but not life-threatening.

T Severe hemorrhage from the vagina may be controlled by local pressure, a pressure dressing, and elevation of the legs.

T Hysteria and fear may indicate that these patients be assigned to triage category 1 for transport.

T Patients with a suspected rupture of the uterus should be assigned to triage category 1 for transport.

DIRECTIONS: Complete the following statements by writing the appropriate word in the blank space provided.

1. Three steps in the general care of abdominal injuries are:
   a. control bleeding
   b. immobilize
   c. prevent further contamination
2. An evisceration is covered with a sterile moist saline dressing.
3. A solid organ tends to bleed when injured.
4. A hollow organ can cause peritonitis.
5. A patient with an abdominal injury should be treated for shock.
6. An impaled object in the abdomen should be stabilized and Immobilized.
7. An injury where skin is lacerated is called an open injury.
8. An injury where skin is NOT lacerated is called a closed injury.

ANSWERS

EMERGENCY MEDICAL AIDE

Student Name:______________________________ Date__________

Class Location____

Instructor:____

MASTERY TEST #7

Common Medical Emergencies

DIRECTIONS: Write each of the following terms next to the correct definition.

-insulin shock
-coronary arteries
-diabetic coma
-AMI
-CHF
-CVA
-ASHD
-angina pectoris
-convulsion

-obesity/smoking/hypertension
-communicable disease
-care for stroke patient

ASHD	Heart disease or hardening of the arteries.
obesity - smoking - hypertension	Risk factors associated with heart disease.
angina pectoris	Chest pain associated with stress or exercise which lasts less than thirty minutes and is relieved by nitroglycerin.
CHF	Congestive heart failure, a heart disease characterized by dyspnea and fluid retention in the lungs and body.
AMI	Acute myocardial infarction, heart attack damage.
coronary arteries	Blood vessels that provide oxygenated blood to the heart muscle.
CBA	Cerebrovascular accident or stroke damage to the brain due to obstruction or rupture of a blood vessel in the brain.
diabetic coma	Decreased LOC, warm dry skin, increased thirst, high level of sugar and ketone bodies in the blood.

insulin shock Cold clammy skin, sudden fainting, convulsions and death due to lack of sugar to feed the brain.

convulsion A series of involuntary contractions of the skeletal muscles.

communicable disease A disease that can be transmitted from one person to the next.

care for stroke patient Observation of vital signs, respiration, pulse, and blood pressure.

List three (3) signs of a heart attack.

1. severe chest pain
2. profuse sweating
3. sudden death

List three (3) signs of a stroke.

1. decreased LOC
2. one sided paralysis
3. slurred speech

A convulsing patient should be protected from possible injury.

Very energetic handling of the stroke patient by the EMT or the family may aggravate the stroke.

[✓ True] or False

In general, the most frequent treatment for an unconscious patient usually involves administering CPR.

[✓ True] or False

Name three modes of transmission of a communicable disease.

1. direct contact
2. touching something that has been in direct contact.
3. inhaling

Name two steps an EMT should do after transporting a patient with a communicable disease.

1. prompt immunization
2. clean ambulance

Name three possible reasons for unconsciousness in a patient.

1. injury
2. diseases
3. neurological disease

(other answers are possible)

A patient having a convulsive seizure, must be kept from injury during the attack, and the EMT must assume an open airway and proper respiration during the unconscious state.

[✓ True] or False

ANSWERS

EMERGENCY MEDICAL AIDE

Student Name: ____________________ Date: __________

Class Location: ______________________________

Instructor: ______________________________

MASTERY TEST #8

Childbirth and Common Pediatric Emergencies

1. The three stages of labor are:

    1. contractions
    2. delivery of the baby
    3. delivery of the placenta

2. Contractions are measured from the beginning of one contraction, to the beginning of the next.

3. Name three (3) procedures to follow when the baby is born.

    1. suction airway
    2. clamp cord
    3. keep infant warm

4. Name three (3) causes of shock in children.

    1. Trauma
    2. airway obstruction
    3. dehydration

5. Write the term next to the correct meaning.

crowning breach large blood clots

large blood clots hemorrhage

breach foot presentation

crowning head presentation

6. What would you do in the event of a stillborn birth?

CPR

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DIRECTIONS: Write each of the following terms next to the correct definition.

infant	child	croup
epiglottitis	SIDS	child abuse

treatment of fever in a child
poison control center or 911
birth of baby is imminent
treatment for pregnant woman with convulsions

poison control center or 911	The place to call when a child has swallowed poison.
epiglottitis	Inflammation of the epiglottis causing airway obstruction.
SIDS	Sudden Infant Death Syndrome - unknown cause of crib death in infants.
treatment of fever for a child	Bathe in tepid water.
infant	A young child from the end of the newborn period (4 weeks) to the age of 12 months.
child abuse	A physically or emotionally abused child.
croup	Acute obstruction of the larynx with a barking cough.
child	A young human from infancy to puberty.
treatment for pregnant woman with convulsions	Soft cloth between back teeth, maintain clear airway, patient placed on side, suction mouth.
birth of baby is imminent	Labor pains, water sac breaks, bloody show.

Two causes of abdominal pain in children are:

1. gastrointerites 2. appendicitis

If a child swallows lye, do not induce vomiting.

[✓ True] or False

Answers

EMERGENCY MEDICAL AIDE

Student Name:______________________ Date:__________

Class Location:______________________________

Instructor:______________________________

MASTERY TEST #9

Drug and Alcohol Abuse

1. Three commonly used depressant drugs are:

    1. alcohol
    2. narcotics
    3. barbiturates

    These drugs drugs have the ability to depress the central nervous system so that the individual may appear to be peaceful and drowsy.

2. Two commonly used stimulant drugs are caffine and cocaine. Withdrawal from those drugs can produce severe depression, coma, and sometimes death.

3. Hallucinogenic drugs can produce dangerous psychiatric symptoms. P. C. P. is a commonly used hallucinogenic drug.

4. State four signs of drug withdrawal.

    1. anxiety
    2. sweating
    3. abdominal cramps
    4. convulsions

5. Alcohol slows reflexes and decreases reaction time. 50% of all traffic fatalities are related to drunk drivers.

6. Trembling and hallucinations are severe signs of alcohol withdrawal.

DIRECTIONS: Write true or false next to the following statements.

___T___ Alcoholism is the disease that can affect men, women, and children of all ages and socioeconomic groups.

___T___ Other illnesses or conditions can be mistaken for alcohol intoxication.

___T___ Alcohol is a gastric (stomach) irritant.

___T___ Patients who abuse street drugs often abuse more than one drug.

ANSWERS

EMERGENCY MEDICAL AIDE

Student Name:______________________________ Date:__________

Class Location:____

Instructor:____

Mastery Test #10

Common Environmental Injuries

1. Which of the following is NOT a common cause of heat injury?

   [✓ a.] chemical burns c. electrical burns
   b. thermal burns d. nuclear burns

2. Which of the following is NOT a function of the skin?

   a. protects the body from its environment
   b. controls temperature
   c. retains fluid
   [✓ d.] provides skeletal support

3. A burn that shows reddening and blister formation would be BEST classified as which of the following:

   a. first degree c. third degree
   [✓ b.] second degree d. fourth degree

4. Third-degree burns are not painful because the nerve ends are burned.

   [✓ True] False

5. Using the rule of "nines", calculate the percentage body burn of an adult with burn on his entire trunk, abdomen, back and chest.

   a. 9% b. 18% [✓ c.] 36% d. 50%

6. In calculating the percentage of body burn for an infant, which of the following statements is CORRECT?

   a. The same formula is used for infants as for adults.
   [✓ b.] The head makes up a higher percentage of the body of an infant.

   c. The arms make up a higher percentage of the body of an infant.

   d. The trunk makes up a higher percentage of the body of an infant.

7. Which of the following burns would be considered critical (severe) burns?

    [✓ a.] A 20%, full-thickness burn, including the face and mouth.

    b. A 5%, full-thickness burn of the buttocks.

    c. A second-degree burn involving the entire left leg.

    d. A third degree burn of the patella.

8. Which is the best substance with which to dress a burned wound?

    [✓ a.] a sheet wet with sterile saline
    b. a dry, sterile sheet
    c. an anesthetic ointment
    d. a sterile sheet wet with hot water

9. The best immediate treatment for a first or second degree burn of less than 20% of the body surface is to immerse the part immediately in cold water.

    [✓ True] or False

10. Your are called to a scene of a fire. The Fire Department has brought out a man who has been severely burned about the shoulders, chest, neck, and face. Your initial assessment reveals probable third-degree burns of these areas. Listed below are four steps that you would take. Re arrange these steps by numbering them in the correct order.

    3 a. Cover the burned areas with sterile dressing.

    4 b. Transport the patient immediately to the hospital.

    2 c. Place the patient in the shock position.

    1 d. Open the airway and make sure he is ventilating properly.

11. Following emergency treatment of a chemical burn to the eye, only the injured eye should be patched.

    True or [✓ False]

12. You are called to an emergency scene near a utility pole, where a line man has been found lying on the ground, having fallen from the pole. His co-workers report that he sustained a severe electric shock and was thrown to the ground. In addition to performing basic life support and establishing an airway, what additional steps should you now take to confirm whether he did or did not have an electrical burn?

____ a. Inspect him for a serious, extensive, full-thickness, third-degree burn.

____ b. Inspect him for a tiny, charred, burned wound of entry.

[✓ c. Look for two burned areas, one where the current entered and one where it left his body.]

____ d. You should not touch him, because, even though he is no longer touching the wire, he may still be electrically alive.

13. The greatest immediate risk of a high-voltage electrical burn is:

[✓ a. The immediate risk of developing cardiac arrhythmia or respiratory arrest.]

____ b. The immediate risk of loss or limb from the burn.

____ c. The immediate risk of developing tetanus from the burn.

____ d. Electrical burns are no different in their risk than thermal burns.

14. You are called to a scene at the seashore. A young woman, attempting to improve her suntan, has been found to have sunburn over 90% of her body. Which of the following statements is most correct about this situation?

[✓ a. She is seriously burned.]

____ b. She does not have significant injury.

____ c. She may show some mild hypotension, but is not in serious danger.

____ d. She has a 90% second-degree burn.

15. You are called to a high school football game. The temperature is 90 degrees, it is a humid day. Your are called to see a spectator who has collapsed. He has been standing in the shade. You find him breathing evenly, talking, sweating profusely, and cool to the touch. You may assume that this patient has:

____ a. heat stroke ____ b. neurogenic shock [✓ c. heat exhaustion]

16. You are called back to the same stadium during the same game. One of the players has collapsed on the field. He is lying in the bright sun. You notice that his skin is hot and dry, he is not perspiring, and he is not responding to verbal stimuli. His pulse is 120 and strong. You may assume that this patient is suffering from:

    ____ a. heat exhaustion

    ____ b. heat cramps

    ____ c. cardiac arrhythmia

    [✓ ____ d. heat stroke]

17. The patient described here is not sweating because:

    ____ a. He has not generated enough body heat to sweat.

    ____ b. He has lost so much fluid that he cannot sweat.

    ____ c. His temperature is so high that his sweat evaporates immediately.

    [✓ ____ d. His body mechanisms for sweating have been overwhelmed.]

18. Which of the following statements best describes the situation in question #17?

    ____ a. Not serious because once the patient is unconscious, he will rapidly recover.

    ____ b. Not serious because, given enough time, the patient will recover.

    [✓ ____ c. Extremely serious because, if left untreated, the patient will die.]

    ____ d. Not serious because the patient is not sweating.

19. What is the immediate emergency treatment for the patient mentioned in question #18?

    ____ a. Cover him with blankets and administer fluid by mouth.

    ____ b. Cover him with blankets and get him out of the sun.

    ____ c. Transport him immediately to the hospital.

    [✓ ____ d. Cool him immediately this sheets wet with cold water.]

20. The specific cause of heat cramps has been proven to be loss of body electrolytes.

[✓ True] or False

21. "Drowning" is suffocation in or under water.

[✓ True] or False

22. "Breath-holding blackout" is a blackout that occurs under water because of hypoxia when the swimmer does not realize the need to take a breath.

[✓ True] or False

23. The determining factors which will influence the possible recovery of a drowning victim are:

1. The speed of the rescue.
2. The immediate clearing of the person's airway.
3. The immediate initiation of artificial ventilation with supplemental oxygen.
4. The innate ability of the person to recover.
5. The kind of water in which the accident occurred.

24. List three types of water accidents which could cause a swimmer to panic.

a. injury b. fatigue c. cold

> loss of orientation, swallowing water, nitrogen narcosis

25. A swimmer with a spinal injury is often found face down in the water.

[✓ True] or False

26. The steps to follow for a drowning victim with a suspected neck injury are as follows:

a. Turn the patient in the water while supporting the head and neck as one unit.

b. Institute artificial ventilation at once without waiting to remove the patient from the water.

c. Continue ventilation while a spine board is floated under the patient, maintaining support of the head and neck until the board is in place.

d. The secured patient is ready for transport.

27. The treatment of a patient suffering from decompression sickness is basic life support, and the definitive treatment is recompression.

[✓ True] or False

28. Write the correct statement next to its appropriate definition:

Poison
Poisoning occurs.
Systems of the body affected by poison.
Categories of poison.
Treatment for rabies.
Vomiting should not be induced.
Treatment for surface poisoning.
Treatment for ingested poisoning.
Brown recluse spider bite.
Reaction to an insect bite/sting.
Black widow spider bite.
Bees, wasps, ants, and spiders.
Three carriers of rabies.

Categories of poisons	Poisons, stings, and bites.
poison	Any substance that can produce a harmful effect on the body processes.
Three carriers of rabies	Dogs, squirrels, and raccoons.
poisoning occurs	Results from ingestion, inhalation, injection, surface contact absorption through the skin and mucous membranes of substances in toxic amounts.
Vomiting should not be induced	The patient is unconscious or semiconscious, or convulsing, poison is strongly corrosive, poison contains a petroleum product.
Treatment for surface poisoning	Dust off area, then wash with soap and water, or flooding area under a shower.
Treatment for ingested poisoning	Dilute the poison in the stomach and then induce its removal by vomiting.

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Systems of the body affected by poison.	Circulatory, gastrointestinal, central nervous system, and skin.
Bees, wasps, ants, spiders.	Common classes of insects that can cause painful or harmful bites.
Reaction to an insect bite or sting.	Sudden pain, swelling, heat, and redness around affected area.
Treatment for rabies	A series of inoculations that may prevent the rabies from developing in a human who has been bitten by a rabid animal.
Black widow spider bite.	Boardlike rigidity of the abdominal muscles.
Brown recluse spider bite.	Local severe tissue damage that can lead to an ulcer.